

Welcome to STN International! Enter x:x

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* * * * * Welcome to STN International * * * * *

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NEWS 2 Apr 08 "Ask CAS" for self-help around the clock
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NEWS 4 Apr 09 ZDB will be removed from STN
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
saved answer sets no longer valid
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
NEWS 15 Jul 30 NETFIRST to be removed from STN
NEWS 16 Aug 08 CANCERLIT reload
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 11:46:17 ON 09 SEP 2002

=> fil casreact
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'CASREACT' ENTERED AT 11:46:28 ON 09 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1974 - 8 Sep 2002 VOL 137 ISS 10

Some records from 1974 to 1991 are derived from the ZIC/VINITI data file and provided by InfoChem.

This file contains CAS Registry Numbers for easy and accurate substance identification.

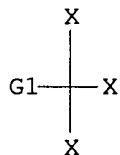
Crossover limits have been increased. See HELP RNCROSSOVER for details.

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=>
Uploading 09961347b.str

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



G1 O, S, Po, Se, Te

Structure attributes must be viewed using STN Express query preparation.

=> s ll
SAMPLE SEARCH INITIATED 11:46:46 FILE 'CASREACT'
SCREENING COMPLETE - 13472 REACTIONS TO VERIFY FROM 672 DOCUMENTS

37.1% DONE	5000 VERIFIED	1639 HIT RXNS	50 DOCS
------------	---------------	---------------	---------

Examiner Anderson 703-605-1157

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED VERIFICATIONS: 262630 TO 276250
PROJECTED ANSWERS: 11722 TO 14748

L2 50 SEA SSS SAM L1 (1639 REACTIONS)

=> s l1 full

FULL SEARCH INITIATED 11:46:52 FILE 'CASREACT'
SCREENING COMPLETE - 242717 REACTIONS TO VERIFY FROM 12870 DOCUMENTS

89.1% DONE	216373 VERIFIED	211045 HIT RXNS (1 INCOMP)	11695 DOCS
98.9% DONE	240069 VERIFIED	234234 HIT RXNS (1 INCOMP)	12306 DOCS
100.0% DONE	242717 VERIFIED	236874 HIT RXNS (1 INCOMP)	12386 DOCS

SEARCH TIME: 00.00.44

L3 12386 SEA SSS FUL L1 (236874 REACTIONS)

=>

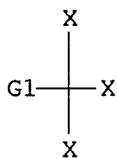
Uploading 09961347b.str

L4 STRUCTURE UPLOADED

=> d

L4 HAS NO ANSWERS

L4 STR



G1 O, S, Po, Se, Te

Structure attributes must be viewed using STN Express query preparation.

=> s l4

SAMPLE SEARCH INITIATED 11:47:49 FILE 'CASREACT'
SCREENING COMPLETE - 1220 REACTIONS TO VERIFY FROM 222 DOCUMENTS

100.0% DONE	1220 VERIFIED	230 HIT RXNS	50 DOCS
-------------	---------------	--------------	---------

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED VERIFICATIONS: 22309 TO 26491
PROJECTED ANSWERS: 3390 TO 5130

L5 50 SEA SSS SAM L4 (230 REACTIONS)

Examiner Anderson 703-605-1157

=> s l4 full

FULL SEARCH INITIATED 11:47:54 FILE 'CASREACT'

SCREENING COMPLETE - 25432 REACTIONS TO VERIFY FROM 4279 DOCUMENTS

100.0% DONE 25432 VERIFIED 24308 HIT RXNS

4039 DOCS

SEARCH TIME: 00.00.03

L6 4039 SEA SSS FUL L4 (24308 REACTIONS)

=> s l6 and pyridine

16818 PYRIDINE

2730 PYRIDINES

17675 PYRIDINE

(PYRIDINE OR PYRIDINES)

L7 289 L6 AND PYRIDINE

=> s l7 and benzyl trichloromethyl sulfide

20819 BENZYL

2 BENZYLS

20819 BENZYL

(BENZYL OR BENZYLS)

886 TRICHLOROMETHYL

8490 SULFIDE

3602 SULFIDES

9325 SULFIDE

(SULFIDE OR SULFIDES)

1 BENZYL TRICHLOROMETHYL SULFIDE

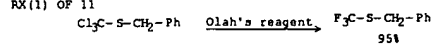
(BENZYL(W)TRICHLOROMETHYL(W)SULFIDE)

L8 1 L7 AND BENZYL TRICHLOROMETHYL SULFIDE

=> d

L8 ANSWER 1 OF 1 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 11



REF: Eur. Pat. Appl., 729930, 04 Sep 1996
NOTE: 0.degree. to room temp.

=> s 16 and benzyl trichloromethyl sulfide

20819 BENZYL

2 BENZYLS

20819 BENZYL

(BENZYL OR BENZYLS)

886 TRICHLOROMETHYL

8490 SULFIDE

3602 SULFIDES

9325 SULFIDE

(SULFIDE OR SULFIDES)

1 BENZYL TRICHLOROMETHYL SULFIDE

(BENZYL(W)TRICHLOROMETHYL(W)SULFIDE)

L9

1 L6 AND BENZYL TRICHLOROMETHYL SULFIDE

=> s 17 and HF

1858 HF

10 HFS

1868 HF

(HF OR HFS)

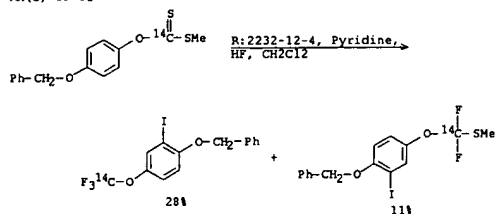
L10

10 L7 AND HF

=> d 110 1-10

L10 ANSWER 1 OF 10 CASREACT COPYRIGHT 2002 ACS

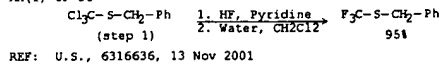
RX(2) OF 52



REF: Journal of Labelled Compounds & Radiopharmaceuticals, 44(12), 815-829, 2001
NOTE: KEY STEP

L10 ANSWER 2 OF 10 CASREACT COPYRIGHT 2002 ACS

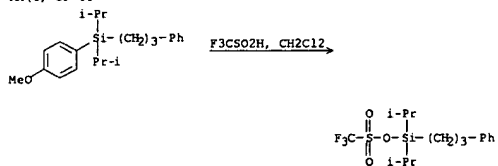
RX(1) OF 36



REF: U.S., 6316636, 13 Nov 2001

L10 ANSWER 3 OF 10 CASREACT COPYRIGHT 2002 ACS

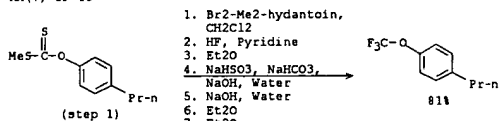
RX(6) OF 61



REF: Journal of Combinatorial Chemistry, 3(3), 312-318, 2001
NOTE: resin supported reaction

L10 ANSWER 4 OF 10 CASREACT COPYRIGHT 2002 ACS

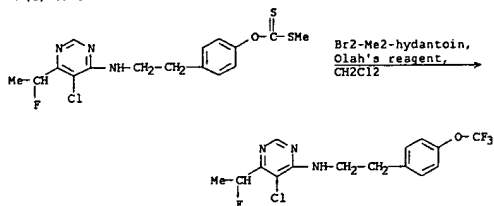
RX(7) OF 15



REF: Bulletin of the Chemical Society of Japan, 73(2), 471-484, 2000
NOTE: ANALOGUES HAVE SIMILAR REACTION

L10 ANSWER 5 OF 10 CASREACT COPYRIGHT 2002 ACS

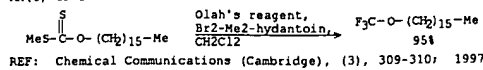
RX(2) OF 3



REF: Jpn. Kokai Tokkyo Koho, 11049759, 23 Feb 1999, Heisei

L10 ANSWER 6 OF 10 CASREACT COPYRIGHT 2002 ACS

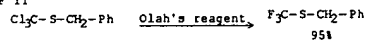
RX(1) OF 9



REF: Chemical Communications (Cambridge), (3), 309-310, 1997

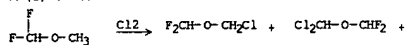
L10 ANSWER 7 OF 10 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 11

REF: Eur. Pat. Appl., 729930, 04 Sep 1996
NOTE: 0.degree. to room temp.

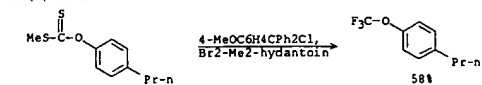
L10 ANSWER 8 OF 10 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 13

REF: Eur. Pat. Appl., 562858, 29 Sep 1993
NOTE: litoreq.50.degree., photochem., vapor phase, trichloro product formation inhibited by oxygen

L10 ANSWER 9 OF 10 CASREACT COPYRIGHT 2002 ACS

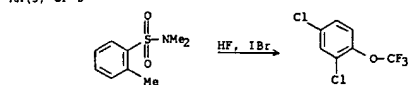
RX(1) OF 3



REF: Tetrahedron Lett., 33(29), 4173-6; 1992

L10 ANSWER 10 OF 10 CASREACT COPYRIGHT 2002 ACS

RX(3) OF 3



REF: Eur. Pat. Appl., 110690, 13 Jun 1984

=> s l6 and pyridine

16818 PYRIDINE

2730 PYRIDINES

17675 PYRIDINE

(PYRIDINE OR PYRIDINES)

L11 289 L6 AND PYRIDINE

=> s l11 and HF

1858 HF

10 HFS

1868 HF

(HF OR HFS)

L12 10 L11 AND HF

=> s l6 and benzyl trichloromethyl sulfide

20819 BENZYL

2 BENZYL

20819 BENZYL

(BENZYL OR BENZYL)

886 TRICHLOROMETHYL

8490 SULFIDE

3602 SULFIDES

9325 SULFIDE

(SULFIDE OR SULFIDES)

1 BENZYL TRICHLOROMETHYL SULFIDE

(BENZYL(W)TRICHLOROMETHYL(W)SULFIDE)

L13 1 L6 AND BENZYL TRICHLOROMETHYL SULFIDE

=> s l6 and HF

1858 HF

10 HFS

1868 HF

(HF OR HFS)

L14 59 L6 AND HF

=> s l6 and peroxide

4068 PEROXIDE

789 PEROXIDES

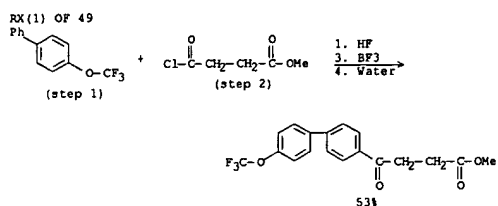
4303 PEROXIDE

(PEROXIDE OR PEROXIDES)

L15 40 L6 AND PEROXIDE

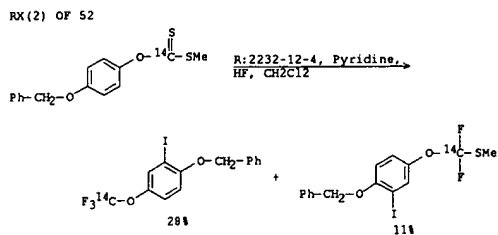
=> d l14 1-59

L14 ANSWER 1 OF 59 CASREACT COPYRIGHT 2002 ACS

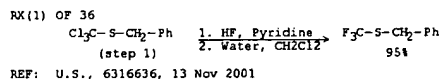


REF: PCT Int. Appl., 2002024622, 28 Mar 2002

L14 ANSWER 2 OF 59 CASREACT COPYRIGHT 2002 ACS

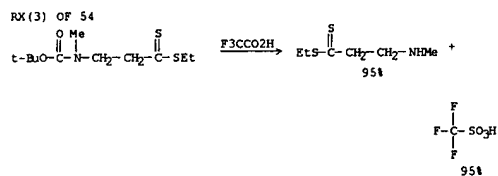
REF: Journal of Labelled Compounds & Radiopharmaceuticals, 44(12), 815-829, 2001
NOTE: KEY STEP

L14 ANSWER 3 OF 59 CASREACT COPYRIGHT 2002 ACS



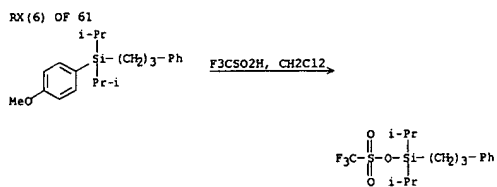
REF: U.S., 6316636, 13 Nov 2001

L14 ANSWER 4 OF 59 CASREACT COPYRIGHT 2002 ACS

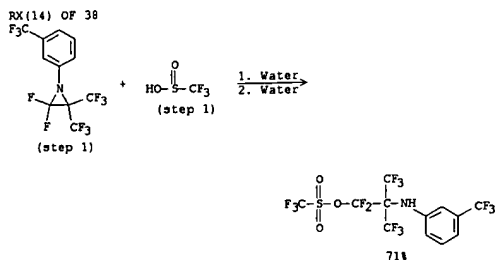


REF: Bioorganic & Medicinal Chemistry, 9(3), 665-675, 2001

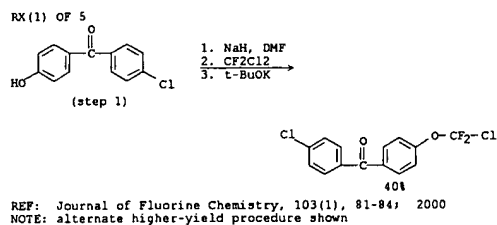
L14 ANSWER 5 OF 59 CASREACT COPYRIGHT 2002 ACS



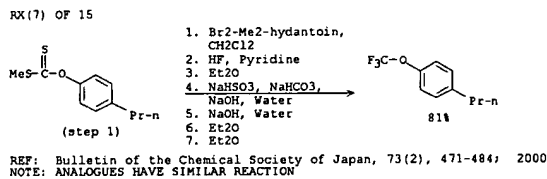
L14 ANSWER 6 OF 59 CASREACT COPYRIGHT 2002 ACS



L14 ANSWER 7 OF 59 CASREACT COPYRIGHT 2002 ACS



L14 ANSWER 8 OF 59 CASREACT COPYRIGHT 2002 ACS

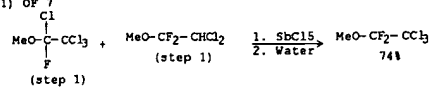


L14 ANSWER 9 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 2 - REACTION DIAGRAM NOT AVAILABLE

L14 ANSWER 10 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 7

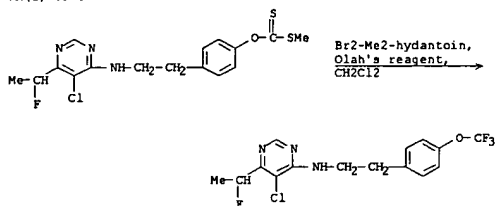


REF: Journal of Fluorine Chemistry, 94(1), 1-5; 1999

NOTE: safety: HF evolved during reaction

L14 ANSWER 11 OF 59 CASREACT COPYRIGHT 2002 ACS

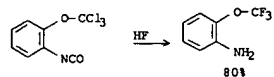
RX(2) OF 3



REF: Jpn. Kokai Tokkyo Koho, 11049759, 23 Feb 1999, Heisei

L14 ANSWER 12 OF 59 CASREACT COPYRIGHT 2002 ACS

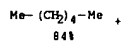
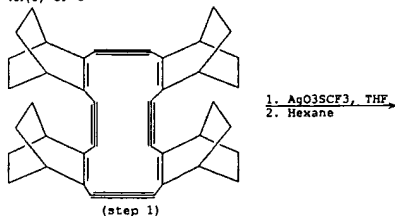
RX(2) OF 6



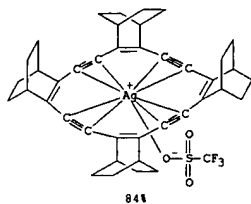
REF: Fr. Demande, 2763940, 04 Dec 1998

L14 ANSWER 13 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1



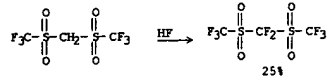
RX(1) OF 1



REF: Chemical Communications (Cambridge), (20), 2263-2264; 1998

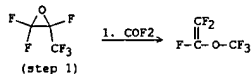
L14 ANSWER 14 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 9

REF: Journal of Fluorine Chemistry, 91(1), 9-12; 1998
NOTE: electrochem.

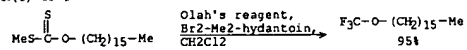
L14 ANSWER 15 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1

REF: Journal of Organic Chemistry, 62(18), 6160-6163; 1997
NOTE: FINAL STAGES ARE DECARBOXYLATION OF INTERMEDIATE PROPIONYL FLUORIDE

L14 ANSWER 16 OF 59 CASREACT COPYRIGHT 2002 ACS

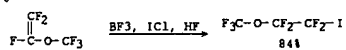
RX(1) OF 9



REF: Chemical Communications (Cambridge), (3), 309-310; 1997

L14 ANSWER 17 OF 59 CASREACT COPYRIGHT 2002 ACS

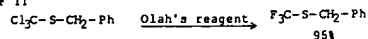
RX(4) OF 8



REF: Journal of Organic Chemistry, 61(26), 9605-9607, 1996
 NOTE: regioselective

L14 ANSWER 18 OF 59 CASREACT COPYRIGHT 2002 ACS

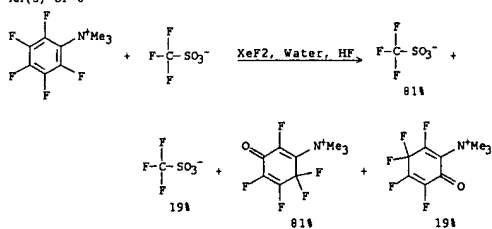
RX(1) OF 11



REF: Eur. Pat. Appl., 729930, 04 Sep 1996
 NOTE: 0.degree. to room temp.

L14 ANSWER 19 OF 59 CASREACT COPYRIGHT 2002 ACS

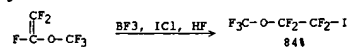
RX(5) OF 8



REF: Zeitschrift fuer Naturforschung, B: Chemical Sciences, 51(7), 1015-1021, 1996
 NOTE: ANALOGOUS REACTION WITH PF6 COUNTERION GIVES SIMILAR RESULTS

L14 ANSWER 20 OF 59 CASREACT COPYRIGHT 2002 ACS

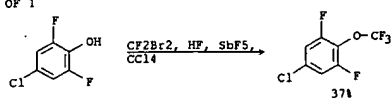
RX(2) OF 3



REF: U.S., 5481028, 02 Jan 1996

L14 ANSWER 21 OF 59 CASREACT COPYRIGHT 2002 ACS

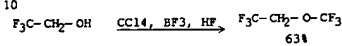
RX(1) OF 1



REF: Ger., 4332383, 27 Apr 1995

L14 ANSWER 22 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 10

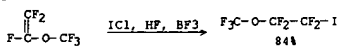


REF: U.S., 5382704, 17 Jan 1995

NOTE: METAL TUBE, 150 DEGREES. FOR 8 H

L14 ANSWER 23 OF 59 CASREACT COPYRIGHT 2002 ACS

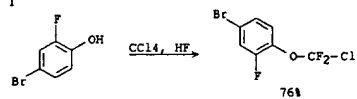
RX(3) OF 5



REF: PCT Int. Appl., 9504020, 09 Feb 1995

L14 ANSWER 24 OF 59 CASREACT COPYRIGHT 2002 ACS

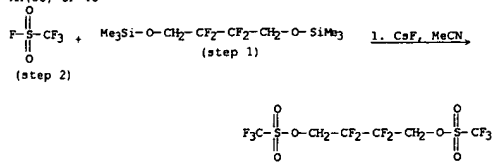
RX(1) OF 1



REF: Jpn. Kokai Tokkyo Koho, 06298694, 25 Oct 1994, Heisei

L14 ANSWER 25 OF 59 CASREACT COPYRIGHT 2002 ACS

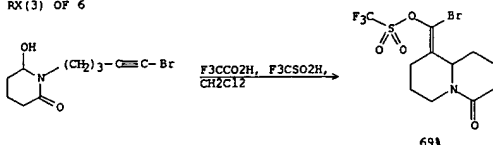
RX (35) OF 40



REF: Inorganic Chemistry, 33(24), 5463-70; 1994

L14 ANSWER 26 OF 59 CASREACT COPYRIGHT 2002 ACS

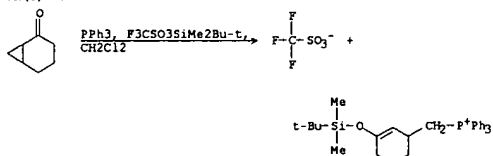
RX (3) OF 6



REF: Bulletin de la Societe Chimique de France, 131(1), 95-104; 1994

L14 ANSWER 27 OF 59 CASREACT COPYRIGHT 2002 ACS

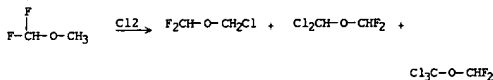
RX (1) OF 7



REF: Bull. Korean Chem. Soc., 14(4), 424-5; 1993

L14 ANSWER 28 OF 59 CASREACT COPYRIGHT 2002 ACS

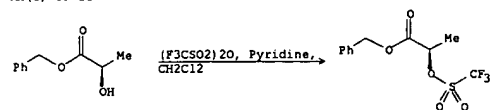
RX (2) OF 13



REF: Eur. Pat. Appl., 562858, 29 Sep 1993
 NOTE: litoreq. 50 degrees, photochem., vapor phase, trichloro product formation inhibited by oxygen

L14 ANSWER 29 OF 59 CASREACT COPYRIGHT 2002 ACS

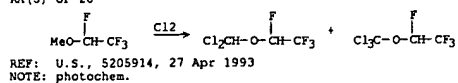
RX(1) OF 21



REF: J. Labelled Compd. Radiopharm., 33(6), 483-91, 1993

L14 ANSWER 30 OF 59 CASREACT COPYRIGHT 2002 ACS

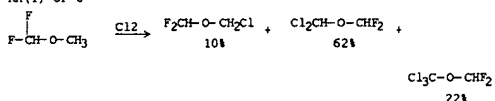
RX(5) OF 20



REF: U.S., 5205914, 27 Apr 1993
NOTE: photochem.

L14 ANSWER 31 OF 59 CASREACT COPYRIGHT 2002 ACS

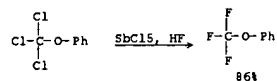
RX(1) OF 5



REF: U.S., 5196600, 23 Mar 1993
NOTE: photochem., product ratio ? on reaction conditoins, gas phase

L14 ANSWER 32 OF 59 CASREACT COPYRIGHT 2002 ACS

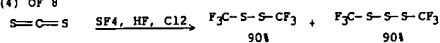
RX(1) OF 3



REF: Jpn. Kokai Tokkyo Koho, 05000988, 08 Jan 1993, Heisei

L14 ANSWER 33 OF 59 CASREACT COPYRIGHT 2002 ACS

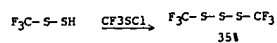
RX(4) OF 8



REF: Zh. Org. Khim., 28(5), 892-900; 1992

L14 ANSWER 34 OF 59 CASREACT COPYRIGHT 2002 ACS

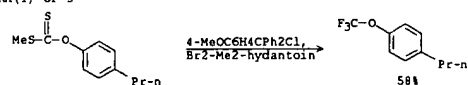
RX(1) OF 2



REF: Inorg. Chem., 31(20), 4147-50; 1992

L14 ANSWER 35 OF 59 CASREACT COPYRIGHT 2002 ACS

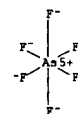
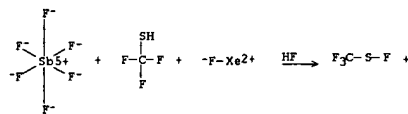
RX(1) OF 3



REF: Tetrahedron Lett., 33(29), 4173-6; 1992

L14 ANSWER 36 OF 59 CASREACT COPYRIGHT 2002 ACS

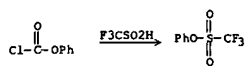
RX(2) OF 4

H⁺

REF: Inorg. Chem., 31(2), 225-7; 1992

L14 ANSWER 37 OF 59 CASREACT COPYRIGHT 2002 ACS

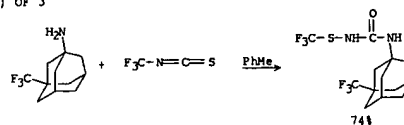
RX(2) OF 2



REF: Fr. Demande, 2647106, 23 Nov 1990

L14 ANSWER 38 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 3



REF: J. Fluorine Chem., 49(2), 225-9; 1990

L14 ANSWER 39 OF 59 CASREACT COPYRIGHT 2002 ACS

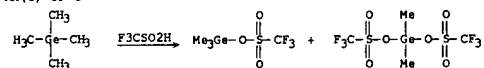
RX(1) OF 3



REF: Ger. (East), 274820, 03 Jan 1990

L14 ANSWER 40 OF 59 CASREACT COPYRIGHT 2002 ACS

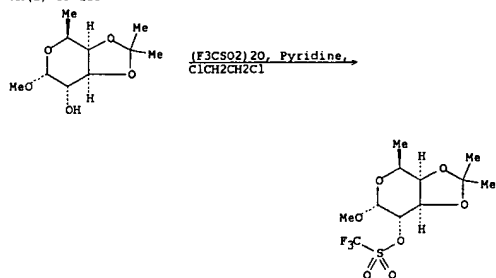
RX(1) OF 6



REF: J. Fluorine Chem., 44(2), 309-28; 1989

L14 ANSWER 41 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 233



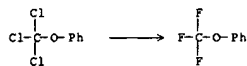
REF: Carbohydr. Res., 187(1), 67-92; 1989

L14 ANSWER 42 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(18) OF 25 - REACTION DIAGRAM NOT AVAILABLE

L14 ANSWER 43 OF 59 CASREACT COPYRIGHT 2002 ACS

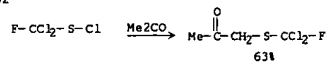
RX(1) OF 1



REF: Eur. Pat. Appl., 196529, 08 Oct 1986

L14 ANSWER 44 OF 59 CASREACT COPYRIGHT 2002 ACS

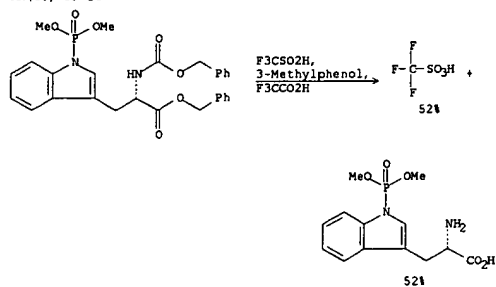
RX(1) OF 52



REF: J. Fluorine Chem., 40(2-3), 365-73; 1988

L14 ANSWER 45 OF 59 CASREACT COPYRIGHT 2002 ACS

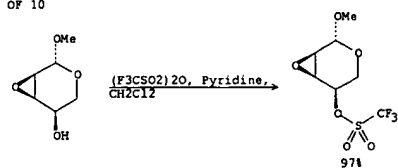
RX(10) OF 26



REF: J. Org. Chem., 54(7), 1664-8; 1989

L14 ANSWER 46 OF 59 CASREACT COPYRIGHT 2002 ACS

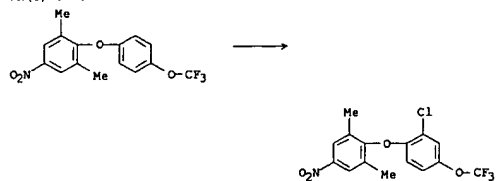
RX(3) OF 10



REF: Carbohydr. Res., 166(2), 309-13; 1987

L14 ANSWER 47 OF 59 CASREACT COPYRIGHT 2002 ACS

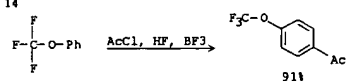
RX(1) OF 1



REF: Ger. Offen., 3602680, 06 Aug 1987

L14 ANSWER 48 OF 59 CASREACT COPYRIGHT 2002 ACS

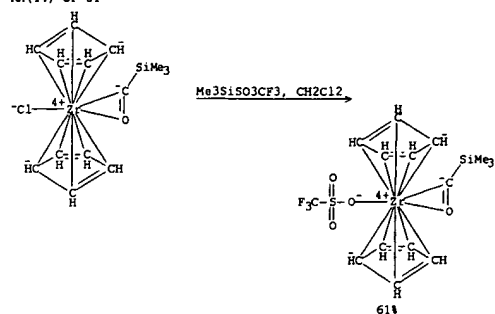
RX(1) OF 14



REF: Bull. Soc. Chim. Fr., (6), 885-90; 1986

L14 ANSWER 49 OF 59 CASREACT COPYRIGHT 2002 ACS

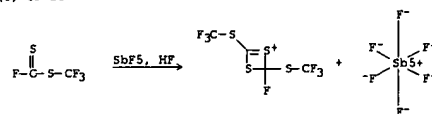
RX(14) OF 51



REF: J. Am. Chem. Soc., 109(7), 2049-56; 1987

L14 ANSWER 50 OF 59 CASREACT COPYRIGHT 2002 ACS

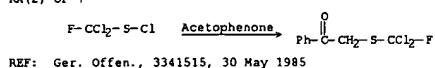
RX(5) OF 25



REF: Chem. Ber., 120(3), 429-33; 1987

L14 ANSWER 51 OF 59 CASREACT COPYRIGHT 2002 ACS

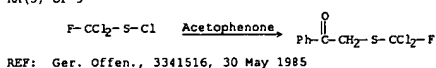
RX(2) OF 7



REF: Ger. Offen., 3341515, 30 May 1985

L14 ANSWER 52 OF 59 CASREACT COPYRIGHT 2002 ACS

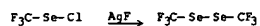
RX(3) OF 9



REF: Ger. Offen., 3341516, 30 May 1985

L14 ANSWER 53 OF 59 CASREACT COPYRIGHT 2002 ACS

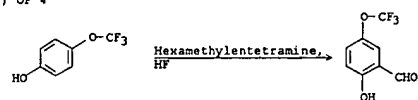
RX(1) OF 13



REF: Z. Naturforsch., B: Anorg. Chem., Org. Chem., 39B(7), 897-902; 1984

L14 ANSWER 54 OF 59 CASREACT COPYRIGHT 2002 ACS

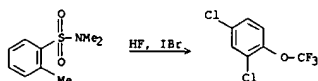
RX(1) OF 4



REF: Ger. Offen., 3304203, 09 Aug 1984

L14 ANSWER 55 OF 59 CASREACT COPYRIGHT 2002 ACS

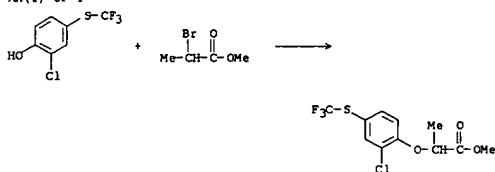
RX(3) OF 3



REF: Eur. Pat. Appl., 110690, 13 Jun 1984

L14 ANSWER 56 OF 59 CASREACT COPYRIGHT 2002 ACS

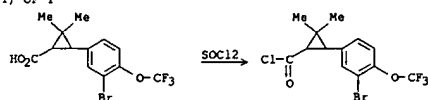
RX(1) OF 1



REF: Ger. Offen., 3232624, 22 Mar 1984

L14 ANSWER 57 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1



REF: Ger. Offen., 3128444, 03 Feb 1983

L14 ANSWER 58 OF 59 CASREACT COPYRIGHT 2002 ACS

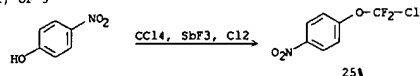
RX(26) OF 82



REF: J. Org. Chem., 45(4), 672-8; 1980

L14 ANSWER 59 OF 59 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 9

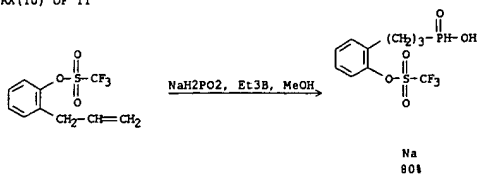


REF: J. Org. Chem., 44(16), 2907-10; 1979

=> d 115 1-40

L15 ANSWER 1 OF 40 CASREACT COPYRIGHT 2002 ACS

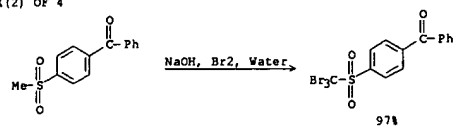
RX(10) OF 11



REF: Journal of Organic Chemistry, 66(20), 6745-6755; 2001

L15 ANSWER 2 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(2) OF 4

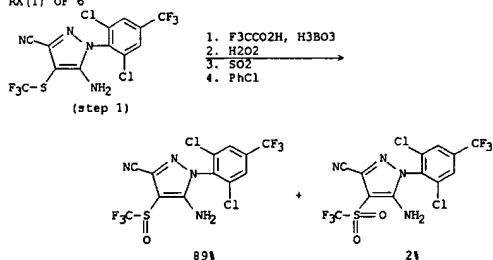


REF: Jpn. Kokai Tokkyo Koho, 2001220376, 14 Aug 2001

NOTE: adding Br2 over 5 h at 60-70.degree.; 65-75.degree. for 10 h

L15 ANSWER 3 OF 40 CASREACT COPYRIGHT 2002 ACS

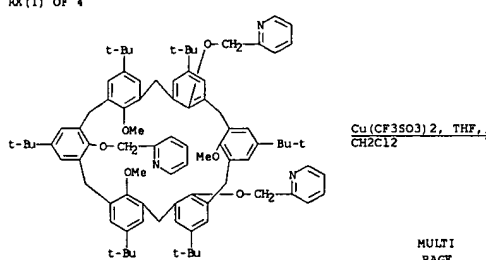
RX(1) OF 6



REF: PCT Int. Appl., 2001030760, 03 May 2001

L15 ANSWER 4 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 4

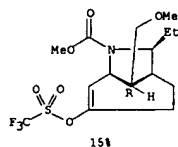
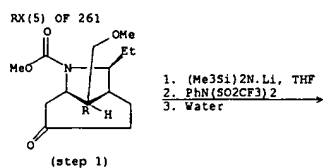


RX(1) OF 4



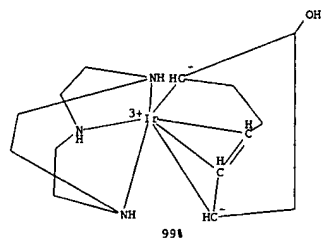
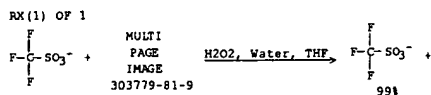
REF: Comptes Rendus de l'Academie des Sciences, Serie IIc: Chimie, 3(10), 811-819; 2000

L15 ANSWER 5 OF 40 CASREACT COPYRIGHT 2002 ACS



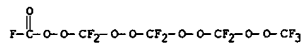
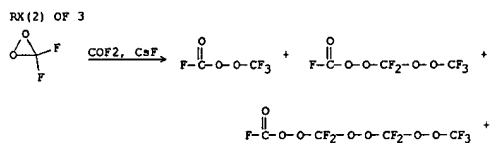
REF: Journal of Organic Chemistry, 65(24), 8317-8325; 2000
NOTE: regioselective

L15 ANSWER 6 OF 40 CASREACT COPYRIGHT 2002 ACS



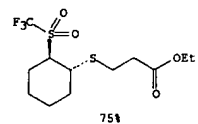
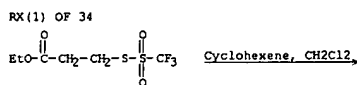
REF: Chemical Communications (Cambridge), (17), 1681-1682; 2000
NOTE: N-Me analog also used; other oxidn. agents gave no result

L15 ANSWER 7 OF 40 CASREACT COPYRIGHT 2002 ACS



REF: Chemical Communications (Cambridge), (17), 1671-1672; 1999
NOTE: gas-phase reactants over solid catalyst in sealed tube

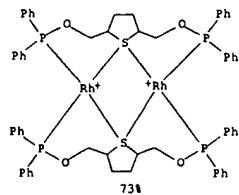
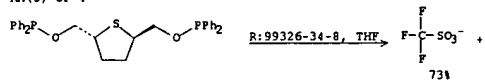
L15 ANSWER 8 OF 40 CASREACT COPYRIGHT 2002 ACS



REF: Tetrahedron, 55(26), 8065-8074; 1999
NOTE: stereoselective

L15 ANSWER 9 OF 40 CASREACT COPYRIGHT 2002 ACS

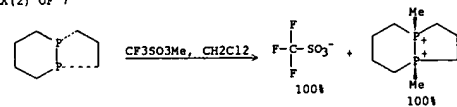
RX(3) OF 4



REF: Organometallics, 17(23), 4976-4982, 1998

L15 ANSWER 10 OF 40 CASREACT COPYRIGHT 2002 ACS

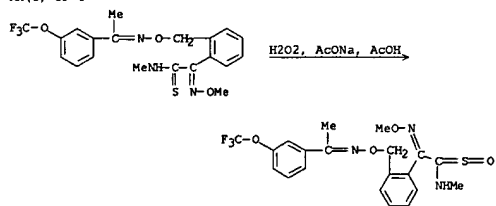
RX(2) OF 7



REF: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry, (10), 1643-1656, 1998

L15 ANSWER 11 OF 40 CASREACT COPYRIGHT 2002 ACS

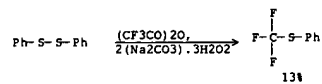
RX(1) OF 1



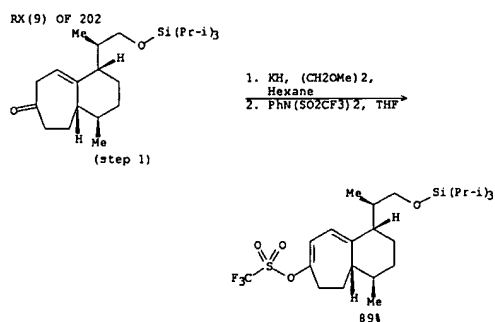
REF: PCT Int. Appl., 9700859, 09 Jan 1997

L15 ANSWER 12 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(6) OF 6

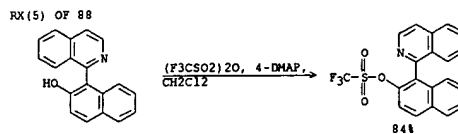
REF: Eur. Pat. Appl., 700885, 13 Mar 1996
NOTE: one-pot reaction

L15 ANSWER 13 OF 40 CASREACT COPYRIGHT 2002 ACS



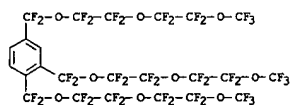
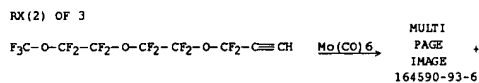
REF: Journal of Medicinal Chemistry, 39(9), 1885-97; 1996

L15 ANSWER 14 OF 40 CASREACT COPYRIGHT 2002 ACS



REF: PCT Int. Appl., 9513284, 18 May 1995

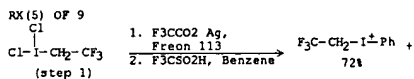
L15 ANSWER 15 OF 40 CASREACT COPYRIGHT 2002 ACS



REF: Izvestiya Akademii Nauk, Seriya Khimicheskaya, (10), 1789-92; 1994

NOTE: THERMAL

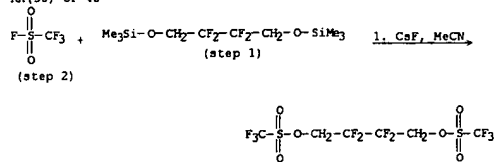
L15 ANSWER 16 OF 40 CASREACT COPYRIGHT 2002 ACS



REF: Tetrahedron Letters, 35(43), 8015-18; 1994

L15 ANSWER 17 OF 40 CASREACT COPYRIGHT 2002 ACS

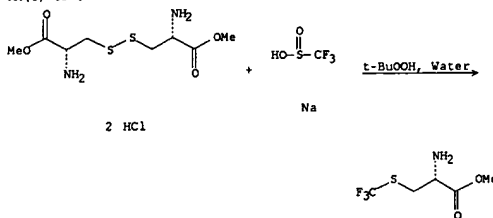
RX (35) OF 40



REF: Inorganic Chemistry, 33(24), 5463-70; 1994
80%

L15 ANSWER 18 OF 40 CASREACT COPYRIGHT 2002 ACS

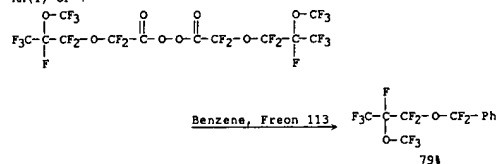
RX (1) OF 9



HCl
48%
REF: Journal of Fluorine Chemistry, 68(1), 63-6; 1994
NOTE: stereoselective

L15 ANSWER 19 OF 40 CASREACT COPYRIGHT 2002 ACS

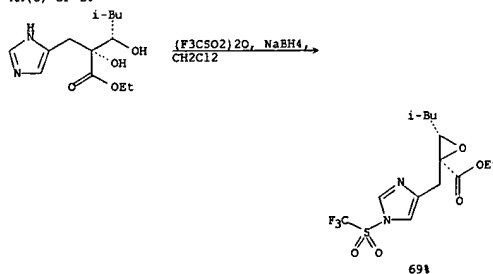
RX (1) OF 7



79%
REF: Jpn. Kokai Tokkyo Koho, 05170689, 09 Jul 1993, Heisei
NOTE: 40.degree.

L15 ANSWER 20 OF 40 CASREACT COPYRIGHT 2002 ACS

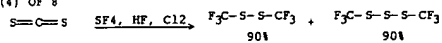
RX (6) OF 28



69%
REF: J. Org. Chem., 58(7), 1762-5; 1993

L15 ANSWER 21 OF 40 CASREACT COPYRIGHT 2002 ACS

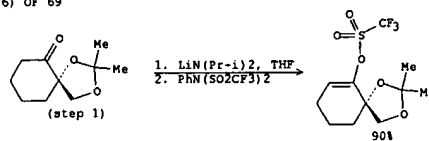
RX(4) OF 8



REF: Zh. Org. Khim., 28(5), 892-900; 1992

L15 ANSWER 22 OF 40 CASREACT COPYRIGHT 2002 ACS

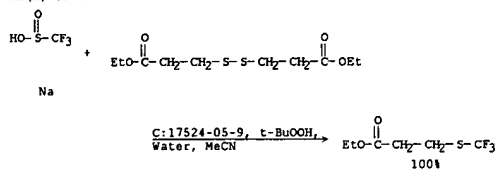
RX(6) OF 69



REF: J. Org. Chem., 57(20), 5301-12; 1992

L15 ANSWER 23 OF 40 CASREACT COPYRIGHT 2002 ACS

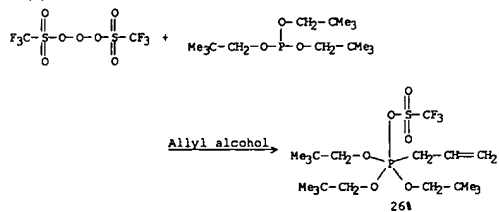
RX(1) OF 7



REF: Eur. Pat. Appl., 458684, 27 Nov 1991

L15 ANSWER 24 OF 40 CASREACT COPYRIGHT 2002 ACS

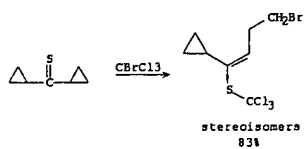
RX(4) OF 16



REF: J. Am. Chem. Soc., 113(6), 2242-6; 1991

L15 ANSWER 25 OF 40 CASREACT COPYRIGHT 2002 ACS

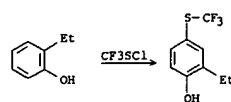
RX(5) OF 5



REF: J. Am. Chem. Soc., 113(5), 1730-6; 1991
NOTE: photochem.

L15 ANSWER 26 OF 40 CASREACT COPYRIGHT 2002 ACS

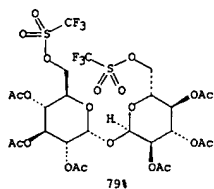
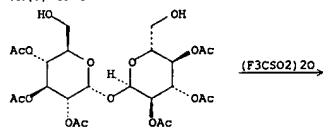
RX(1) OF 2



REF: Ger. Offen., 3836149, 10 May 1990

L15 ANSWER 27 OF 40 CASREACT COPYRIGHT 2002 ACS

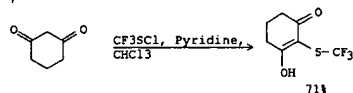
RX(8) OF 18



REF: Carbohydr. Res., 200,, 377-89; 1990

L15 ANSWER 28 OF 40 CASREACT COPYRIGHT 2002 ACS

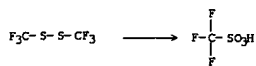
RX(1) OF 7



REF: J. Fluorine Chem., 47(1), 131-6; 1990
NOTE: TAUTOMERIC REACTANT ALSO PRESENT

L15 ANSWER 29 OF 40 CASREACT COPYRIGHT 2002 ACS

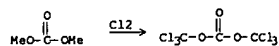
RX(1) OF 1



REF: Ger. Offen., 3712318, 20 Oct 1988

L15 ANSWER 30 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 1

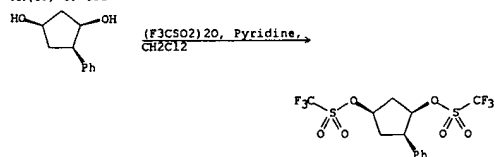


REF: Bul. Stiint. Teh. Inst. Politeh. "Traian Vuia" Timisoara, Ser. Chim., 32(1-2), 53-8, 1987

NOTE: photochem.

L15 ANSWER 31 OF 40 CASREACT COPYRIGHT 2002 ACS

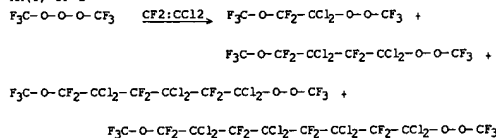
RX(18) OF 393



REF: J. Org. Chem., 53(13), 3098-104, 1988

L15 ANSWER 32 OF 40 CASREACT COPYRIGHT 2002 ACS

RX(1) OF 2

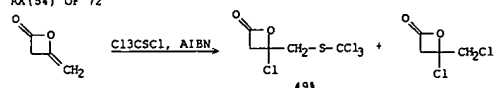


REF: J. Fluorine Chem., 37(1), 47-51, 1987

NOTE: gas phase

L15 ANSWER 33 OF 40 CASREACT COPYRIGHT 2002 ACS

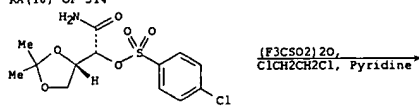
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REF: J. Chem. Soc., Perkin Trans. 1, (12), 2081-90; 1986
 NOTE: photochem.

L15 ANSWER 34 OF 40 CASREACT COPYRIGHT 2002 ACS

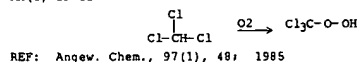
RX(18) OF 314



REF: J. Org. Chem., 50(19), 3462-7; 1985

L15 ANSWER 35 OF 40 CASREACT COPYRIGHT 2002 ACS

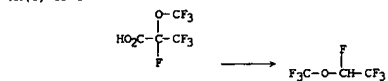
RX(1) OF 13



REF: Angew. Chem., 97(1), 48; 1985

L15 ANSWER 36 OF 40 CASREACT COPYRIGHT 2002 ACS

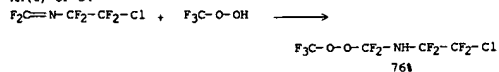
RX(1) OF 3



REF: Zh. Vses. Khim. O-va., 29(1), 113-14; 1984

L15 ANSWER 37 OF 40 CASREACT COPYRIGHT 2002 ACS

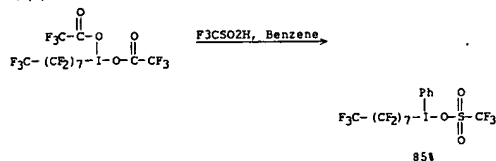
RX (6) OF 34



REF: J. Org. Chem., 48 (25), 4844-7; 1983

L15 ANSWER 38 OF 40 CASREACT COPYRIGHT 2002 ACS

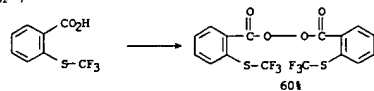
RX (1) OF 40



REF: J. Fluorine Chem., 20 (5), 695-8; 1982

L15 ANSWER 39 OF 40 CASREACT COPYRIGHT 2002 ACS

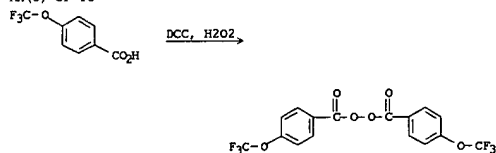
RX (4) OF 7



REF: Khimiya i Tekhnol. Elementoorgan. Poluproduktov. i Polimerov, Volgograd, 92-7; 1981

L15 ANSWER 40 OF 40 CASREACT COPYRIGHT 2002 ACS

RX (3) OF 16



REF: Zh. Org. Khim., 17 (8), 1652-7; 1981

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FULL ESTIMATED COST

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464.52

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FILE LAST UPDATED: 8 Sep 2002 (20020908/ED)

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=> s fluorocarbon

12055 FLUOROCARBON

3750 FLUOROCARBONS

L16 13705 FLUOROCARBON

(FLUOROCARBON OR FLUOROCARBONS)

=> s l16 and process

1708883 PROCESS

1096956 PROCESSES

2519833 PROCESS

(PROCESS OR PROCESSES)

L17 2427 L16 AND PROCESS

=> s l17 and peroxide or halogen

159105 PEROXIDE

37803 PEROXIDES

174663 PEROXIDE

(PEROXIDE OR PEROXIDES)

92775 HALOGEN

17591 HALOGENS

102322 HALOGEN

(HALOGEN OR HALOGENS)

L18 102346 L17 AND PEROXIDE OR HALOGEN

```
=> s l17 and (peroxide or halogen)
    159105 PEROXIDE
    37803 PEROXIDES
    174663 PEROXIDE
        (PEROXIDE OR PEROXIDES)
    92775 HALOGEN
    17591 HALOGENS
    102322 HALOGEN
        (HALOGEN OR HALOGENS)
L19      72 L17 AND (PEROXIDE OR HALOGEN)

=> s l19 and benzyl trichloromethyl sulfide
    120082 BENZYL
    43 BENZYLS
    120096 BENZYL
        (BENZYL OR BENZYLS)
    5762 TRICHLOROMETHYL
    2 TRICHLOROMETHYLS
    5763 TRICHLOROMETHYL
        (TRICHLOROMETHYL OR TRICHLOROMETHYLS)
    255284 SULFIDE
    71298 SULFIDES
    284092 SULFIDE
        (SULFIDE OR SULFIDES)
    1 BENZYL TRICHLOROMETHYL SULFIDE
        (BENZYL(W)TRICHLOROMETHYL(W)SULFIDE)
L20      0 L19 AND BENZYL TRICHLOROMETHYL SULFIDE

=> s l19 and sulfur
    274389 SULFUR
    434 SULFURS
    274609 SULFUR
        (SULFUR OR SULFURS)
L21      12 L19 AND SULFUR

=> d ibib abs hitstr 1-12
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L21 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2002:271049 CAPLUS
 DOCUMENT NUMBER: 136:298291
 TITLE: Etching with halogen-containing gas mixtures for removal of rhodium and/or iridium films
 INVENTOR(S): Vaartstra, Brian A.
 PATENT ASSIGNEE(S): Micron Technology, Inc., USA
 SOURCE: U.S., 9 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6368518	B1	20020409	US 1999-382506	19990825
AB				
The Ir, Rh, or Ir-Rh alloy films on metal or semiconductor substrates are removed by etching with gas or plasma contg. halogen (or halide vapor) and preferably an auxiliary gas. The etching gas mixt. typically contains: (a) halogen, halide, and optionally fluorocarbon or chlorocarbon vapors; and (b) the auxiliary gas, typically CO or NO; and (c) optional O-contg. gas, esp. O ₂ . The process is suitable for pattern etching of the Ir or Rh films precoated with a resist layer. The typical gas mixt. for etching of Ir electrode film contains F ₂ , CO, and Ar.				
REFERENCE COUNT:	15	THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L21 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2001:614312 CAPLUS
 DOCUMENT NUMBER: 135:161183
 TITLE: Method for planarizing polysilicon layer by etching with oxygen- and halogen-based gas mixture
 INVENTOR(S): Lin, Chingfu
 PATENT ASSIGNEE(S): Taiwan Semiconductor Manufacturing Co., Ltd., Taiwan
 SOURCE: U.S., 5 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6277741	B1	20010821	US 1999-282052	19990329
US 6277741	B1	20010821	TW 1999-88103215AA	19990303
PRIORITY APPLN. INFO.:				
AB				
A method for planarizing a polysilicon layer is described. A polysilicon layer is etched with an O-based gas and a halogen-based gas. The O-based gas comprises an N oxide gas. The N oxide gas includes NO, NO ₂ , N ₂ O, or the combination thereof. The halogen-based gas includes a F, Cl, Br, I, NF ₃ , SF ₆ , Cl ₂ , HCl, SiCl ₄ , fluorocarbon, or a combination thereof. The fluorocarbon includes CF ₄ , CHF ₃ , CH ₂ F ₂ , CH ₃ F, or the like.				
REFERENCE COUNT:	6	THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L21 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2001:214847 CAPLUS
 DOCUMENT NUMBER: 134:256151
 TITLE: Decomposition treatment agent and decomposition method for organic halogen compounds.
 INVENTOR(S): Furuta, Takayuki; Murakami, Tatsuo; Aitou, Shigeru; Akatsuka, Yoshimasa; Takeuchi, Akihiro
 PATENT ASSIGNEE(S): Ueda Sekkai Seizo K. K., Japan; Chubu Electric Power Co., Inc.
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JXOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001079344	A2	20010327	JP 1999-262600	19990916
AB				
The org. halogen decompn. agents contain magnesium oxide at .gtoreq.50 wt. % or magnesium oxide and calcium oxide at .gtoreq.50 wt. % in which the mol. ratio of CaO/CaO+MgO is .ltoreq.0.67. The granular agents do not melt and form lumpy masses when in contact with org. halogen decompn. at high temp. (800-1400.degree.).				

L21 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2001:101447 CAPLUS
 DOCUMENT NUMBER: 134:140485
 TITLE: Sidewall polymer forming gas additives for plasma etching processes in semiconductor device fabrication
 INVENTOR(S): Williams, Raney; Chinn, Jeffrey; Trevor, Jitoko; Lill, Thorsten B.; Nallan, Padmapani; Varga, Tamas; Mace, Hervé
 PATENT ASSIGNEE(S): Applied Materials, Inc., USA
 SOURCE: PCT Int. Appl., 32 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001009934	A1	20010208	WO 2000-US21456	20000803
W: JP, KR				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1208598	A1	20020529	EP 2000-950996	20000803
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, HK, CY, AL				
PRIORITY APPLN. INFO.:				
			US 1999-366509	A 19990803
			WO 2000-US21456	W 20000803
AB				
A process of reducing crit. dimension (CD) microloading in dense and isolated regions of etched features of Si-contg. material on a substrate uses a plasma of an etchant gas and an additive gas. In one version, the etchant gas comprises halogen species absent F, and the additive gas comprises F species and C species, or H species and C species.				
REFERENCE COUNT:	11	THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L21 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2000:540835 CAPLUS
 DOCUMENT NUMBER: 133:139536
 TITLE: Method and apparatus for suppressing greenhouse effect gases
 INVENTOR(S): Shoji, Yuichi; Unoki, Kazuo; Nagayama, Kenichi
 PATENT ASSIGNEE(S): Toshiba Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JQOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000218129	A2	20000808	JP 1999-22284	19990129

AB Emission of CO₂ gas generated during treatment of usable resources such as fossil fuels, combustible wastes, and the likes in a molten salt furnace is suppressed by utilizing CO₂ for synthesis of MeOH or storing CO₂ to be utilized later. Alternatively, greenhouse effect gases, e.g. CH₄, NO₂, fluorocarbons, SF₆, halogen-contg. gases, and their liqs., can be detoxicated by treating them in a molten salt reactor. The app. for suppressing greenhouse effect gases comprises a molten salt reactor into which the greenhouse effect gases and acidic gases are introduced, a filtration app. for filtering insol. components produced in the reactor, and a molten salt electrolytic regenerator for regenerating the salts in the filtered liq. Another app. is also claimed. CO₂ is utilized for MeOH synthesis or as pure CO₂ in a closed system and greenhouse effect gases besides CO₂ are detoxicated and decompd. with a miniaturized app.

L21 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS (Continued)
 acid/base rather than redox chem. and the occurrence of fragmentation at the surface rather than after departure. The silyl ions show ion/surface reactions which are dominated by fluorine abstraction from the surface but they also include such remarkable processes as fluorine-for-Me substitution, which occurs with the isothiocyanate projectile ion (4). Surface modification of fluorinated self-assembled monolayer surfaces was accomplished by prolonged bombardment with low-energy OCNCS⁺ and (CH₃)₂SiNCS⁺ ions. Evidence is provided for incorporation of Me, silyl, and NCS groups into the modified surface, although the energetic conditions needed to cause the bond dissocons. necessary for ion/surface reactions make the formation of modified surfaces esp. difficult in these cases.

L21 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1997:214996 CAPLUS
 DOCUMENT NUMBER: 126:334853
 TITLE: Ion/surface reactions, surface-induced dissociation and surface modification resulting from hyperthermal collisions of OCNCO⁺, OCNCS⁺, (CH₃)₂SiNCO⁺, and (CH₃)₂SiNCS⁺ with a fluorinated self-assembled monolayer surface
 AUTHOR(S): Miller, S. A.; Luo, H.; Jiang, X.; Rohrs, H. W.; Cooks, R. G.
 CORPORATE SOURCE: Department of Chemistry, Purdue University, West Lafayette, USA
 SOURCE: International Journal of Mass Spectrometry and Ion Processes (1997), 160(1-3), 83-105
 CODEN: IJMPDN; ISSN: 0168-1176
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Low-energy (10-90 eV) collisions of the pseudohalogen-contg. ions OCNCO⁺ (1), OCNCS⁺ (2), (CH₃)₂SiNCO⁺ (3), and (CH₃)₂SiNCS⁺ (4) with fluorinated self-assembled (F-SAM) monolayer surfaces lead to surface-induced dissocon. (SID) and to a variety of ion/surface reactions. The lowest energy fragmentation process in both OC-NCO⁺ and OC-NCS⁺ is C-N bond cleavage but the strength of these bonds is significantly different. They are estd. from surface-induced dissocon. data taken as a function of collision energy (energy resolved mass spectra) to be 4 and 3 eV, resp. The silyl ions, (3) and (4), preferentially fragment by Si-C bond cleavage and dissocon. more readily than (1) and (2). Other SID processes also occur by simple cleavage of the various strong bonds in these ions and charge retention by the sulfur in preference to oxygen is evident in the isothiocyanate spectra. The collision energy dependence of the scattered ion spectra display the competition between elastic scattering, dissocon., reaction, and surface sputtering. The extent of sputtering increases with collision energy and is greater in (1) and (2) than it is in the silicon-contg. ions (3) and (4), and the implications of this result for the ionization energy of the radicals corresponding to (1)-(4), are addressed. On the other hand, OCNCO⁺ and OCNCS⁺ are less reactive than their silyl counterparts, and data suggest that the obsd. reactions do not proceed by charge exchange but instead by a direct reaction mechanism. The reaction products in the two pairs of ions (e.g. FCO⁺ from (1), PCS⁺ from (2), vs. SiF⁺ and SiH₂F⁺ from (3) and (4)) are notably different, consistent with the differences in the SID behavior and showing that the major reactive site in (3) and (4) is the silicon atom. Comparisons between the isocyanates and isothiocyanates show that the NCS group confers much greater reactivity than the NCO group within each pair of projectile ions. Analogies are found in the ion/surface reactions of the halogens and pseudohalogens, including the apparent displacement of fluorine in the F-SAM by NCO and NCS groups suggested by the scattered ions at m/z 73 (OCNCF⁺), m/z 64 (NCF₂⁺) and m/z 45 (NCF⁺). Evidence that a pseudohalogen group exchanges with a fluorine from the surface is also found in the presence of FCO⁺ and PCS⁺ among the scattered products of collisions of (2) with the fluorocarbon surface. The collision energy dependence of these ion/surface reaction products for the OCNCO⁺ and OCNCS⁺ projectile ions provides evidence for dissocon. at the surface followed or accompanied by bond formation. A general mechanism is proposed for the obsd. ion/surface reactions based on Lewis

L21 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1995:316220 CAPLUS
 DOCUMENT NUMBER: 123:45714
 TITLE: Dry etching of silicon compound layers
 INVENTOR(S): Yanagida, Toshiharu
 PATENT ASSIGNEE(S): Sony Corp., Japan
 SOURCE: U.S., 8 pp.
 CODEN: USOXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5376234	A	19941227	US 1993-78928	19930621
JP 3109253	B2	20001113	JP 1992-170980	19920629

PRIORITY APPLN. INFO.: JP 1992-170980 A 19920629
 AB A mercaptan, a thioether, and/or a disulfide having a fluorocarbon side chain is used as a main component of the etching gas. These compds. may form CF_x⁺ and S on dissocon. due to elec. discharges, and contribute to high-rate etching and surface protection of a wafer. If a halogen compd. such as COF₂, SOF₂, or NOF is added to the etching gas, a high-rate etching reaction due to extn. of O atoms from SiO₂ and structural reinforcement of carbonaceous polymer become possible. Also, SF₂ may be added for reinforcing deposition of S. These effects lead to a retn. of the amt. of deposited polymer necessary for highly selective processing, and contribute greatly to low pollution in a process.

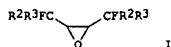
L21 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1994:522988 CAPLUS
 DOCUMENT NUMBER: 121:122988
 TITLE: Low-Energy Collisions of Group IIIA, IVA, VA, VIA, and VIIA Ions with Fluoroalkyl SAM Surfaces: Reactions, Chemical Sputtering, and Mechanistic Implications
 AUTHOR(S): Pradeep, T.; Ast, T.; Cooks, R. G.; Feng, B.
 CORPORATE SOURCE: Department of Chemistry, Purdue University, West Lafayette, IN, 47907, USA
 SOURCE: J. Phys. Chem. (1994), 98(37), 9301-11
 CODEN: JPCHAM; ISSN: 0022-3654
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Low-energy (10-90 eV) at. ions of Group IIIA, IVA, VA, VIA, and VIIA elements (E) undergo reactions with a fluorinated self-assembled monolayer surface to give fluoride cations, EF_n^+ ; 1, 2, or 3 F atoms can be abstracted. Ion/surface reactions are also obsd. with polyat. ions of these elements, but in general, at. ions are much more reactive and react at lower collision energies than the corresponding polyat. species. The higher collision energies reflect increased energy consumption needed for fragmentation. Most of the ion/surface reactions studied in this study are endothermic and are driven by the translational energy of the projectile, although there remains a high degree of thermochem. control over reactivity. Thermochem. control over neutralization of the primary beam is also evident; ions with high recombination energies (e.g., N^+ and O^+) completely neutralize at the fluorocarbon surface. In addn., certain general trends in behavior are obsd. for elements within the same periodic group. The reactions occur in single scattering events, and they are not assocd. with electron transfer from the ion to the surface, as are the well-known H and alkyl group abstractions by org. radical ions. The surface has no memory of the projectile, even after prolonged ion beam exposure. In most cases, the ion/surface reaction seems to occur after, or in concert with, disocn. of the polyat. projectile. When multiple abstractions occur, the F atoms can be lost from the same alkyl chain; evidence for this is the enhanced intensity of specific sputtering products (e.g., CF_3^+) upon collisions of ions (e.g., Sb^+) which readily abstr. > 1 F atom. Ion/surface reactions in which new bonds are formed in the surface alkyl group are also obsd.; such reactions produce unusual product ions which are sensitive to the chem. nature of the projectile. Examples include Cl-for-F atom substitution at the surface and PCF_2^+ formation in P^+ collisions. These processes suggest the possibility of selective chem. modification of the outermost monolayers of surfaces by using low-energy reactive ion beams.

L21 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1994:522988 CAPLUS
 DOCUMENT NUMBER: 121:122988
 TITLE: 1 MHz Parallel-plate discharges in etching gases: CF_4 and SF_6
 AUTHOR(S): Kobayashi, Hidehiko; Kusunoki, Hideki; Ishikawa, Itaru; Nagaseki, Kazuya; Saito, Yukinori; Suganoma, Shinji
 CORPORATE SOURCE: Fac. Eng., Yamaguchi Univ., Kofu, 400, Japan
 SOURCE: Shinku (1994), 37(3), 308-11
 CODEN: SHINAM; ISSN: 0559-8516
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 AB The electronegativities and discharge characteristics of halogen -contg. gases such as CF_4 and SF_6 are compared. These gases are discharged between parallel plate electrodes and used for etching process for semiconductor device fabrication.

L21 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1991:582630 CAPLUS
 DOCUMENT NUMBER: 115:182630
 TITLE: Fluorocarbon compounds and processes for preparation thereof
 INVENTOR(S): Krespan, Carl George
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
 SOURCE: PCT Int. Appl., 26 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9109010	A2	19910627	WO 1990-US7114	19901210
WO 9109010	A3	19910905		
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5101058	A	19920331	US 1989-448651	19891211
CA 2071199	AA	19910612	CA 1990-2071199	19901210
EP 504285	A1	19920923	EP 1991-901382	19901210
EP 504285	B1	19941012		
R: DE, FR, GB, IT				
JP 05502866	T2	19930520	JP 1991-501767	19901210
JP 3172173	B2	20010604		
JP 2000053665	A2	20000222	JP 1999-201502	19901210
US 5185477	A	19930209	US 1991-803441	19911206
JP 2000053604	A2	20000222	JP 1999-201485	19990715
JP 3130303	B2	20010131		
PRIORITY APPLM. INFO.:				
		US 1989-448651	A	19891211
		JP 1991-501767	A3	19901210
		WO 1990-US7114	W	19901210

OTHER SOURCE(S): MARPAT 115:182630
 GI



AB Fluorinated (poly)sulfonates and halosulfonates $R_2R_3FCXCHXCH_2R_1(OSO_2)_nZ$ ($R_1 = H, CF_2R_2R_3$; $R_2, R_3 = F$, perfluoroalkyl; $R_1 = H, CF_2R_2R_3$; $X = Cl, Br$, iodo; $Z = Cl, Br, OCH_2CHXCH_2R_2R_3$; $n = 1-6$), halohydrins $R_2R_3CHXCH(OH)CF_2R_2R_3$, and epoxides (1), useful as monomers and chem. intermediates, are prepd. by reacting (perfluoroalkyl)ethylenes $R_2R_3FCCH_2R_1$ with SO_3 and a halogen, i.e. Cl, Br or iodine, in the optional presence of a solvent, and further reacting the products. Thus, 0.13 mol $CF_3(CF_2)_3CH_2CH_2$ was added to 0.12 mol SO_3 with stirring at 25.degree. followed by 0.12 mol I , whereupon an exotherm carried to 45.degree. and then abated. The mixt. was stirred overnight at 25.degree. and then at 50.degree. for 30 min, evapd. in vacuo at 0.15 mmHg, stirred with H_2O , filtered and air-dried to give 58% (based on SO_3) $[CF_3(CF_2)_3CH_2CH_2O]_2SO_2$.

L21 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1984:478619 CAPLUS
 DOCUMENT NUMBER: 101:78619
 TITLE: On the scavenging of sulfur dioxide by cloud and raindrops: II. An experimental study of sulfur dioxide absorption and desorption for water drops in air
 AUTHOR(S): Walcek, C. J.; Pruppacher, H. R.; Topalian, J. H.; Mitra, S. K.
 CORPORATE SOURCE: Dep. Atmospheric Sci., Univ. California, Los Angeles, CA, 90024, USA
 SOURCE: J. Atmos. Chem. (1984), 1(3), 291-306
 CODEN: JATCE2
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB For the purpose of testing our previously described theory of SO_2 scavenging, a lab. investigation was carried out in the UCLA 33 m long rainshaft. Drops with radii between 250 and 2500 μm were allowed to come to terminal velocity, after which they passed through a chamber of variable length filled with various SO_2 concns. in air. After falling through a gas sepp. chamber consisting of a fluorocarbon gas, the drops were collected and analyzed for their total S content to det. the rate of SO_2 absorption. The SO_2 concn. in air was 1-60 vol.%. Such relatively large concns. were necessary due to the short times the drops were exposed to SO_2 . Theor. S concn. in the drops agreed well with those obsd., if the drops had radii <500 μm . To obtain agreement between predicted and obsd. S concns. in larger drops, an empirically derived eddy diffusivity for SO_2 in water had to be included in the theory to take into account the effect of turbulent mixing inside such large drops. In a subsequent set of expts., drops initially satd. with S (IV) were allowed to fall through S-free air to det. the rate of SO_2 desorption. The results agreed well with the results of the theor. model, thus justifying the reversibility assumption. The effects of oxidn. on SO_2 absorption was studied by means of drops contg. various amts. of H_2O_2 . For comparable exposure times to SO_2 , the S concn. in drops with H_2O_2 was 10 times higher than the concn. in drops in which no oxidn. occurred.

L21 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1983:514428 CAPLUS

DOCUMENT NUMBER: 99:114428

TITLE: Silicon surface treatment in halogen

-containing plasma

AUTHOR(S): Dikarev, Yu. I.; Esin, V. I.; Naumenko, N. I.

CORPORATE SOURCE: Voronezh, USSR

SOURCE: Fiz. Khim. Obrab. Mater. (1983), (4), 61-5

CODEN: FKOMAT; ISSN: 0015-3214

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The processes of etching were studied of single-crystal Si with different orientations and surface treatments in the plasma of a high-frequency discharge of F-contg. gases at pressures of 13.3-133.3 Pa. By changing the tech. parameters of the process, one can obtain both pure etching of Si and deposition of films identified as fluorocarbon. During plasmachem. etching of a polished surface, only insignificant smoothing of the initial relief occurs with development of an etching figure characteristic for the given orientation. Electronog. studies of samples after plasmachem. etching in the polishing regime show the absence of amorphization of the surface in the treatment process.

=> s fluorocarbon/product
'PRODUCT' IS NOT A VALID FIELD CODE
L22 0 FLUOROCARBON/PRODUCT

=> s fluorocarbon/p
'P' IS NOT A VALID FIELD CODE
L23 0 FLUOROCARBON/P

=> fil caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	46.12	510.64
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-7.43	-7.43

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FILE COVERS 1907 - 9 Sep 2002 VOL 137 ISS 11
FILE LAST UPDATED: 8 Sep 2002 (20020908/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> fil reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.40	511.04
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-7.43

FILE 'REGISTRY' ENTERED AT 11:58:42 ON 09 SEP 2002
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STRUCTURE FILE UPDATES: 6 SEP 2002 HIGHEST RN 447682-31-7
DICTIONARY FILE UPDATES: 6 SEP 2002 HIGHEST RN 447682-31-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

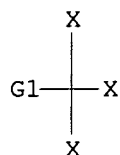
Uploading 09961347b.str

L24 STRUCTURE UPLOADED

=> d

L24 HAS NO ANSWERS

L24 STR



G1 O, S, Po, Se, Te

Structure attributes must be viewed using STN Express query preparation.

=> s l24

SAMPLE SEARCH INITIATED 11:59:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5036 TO ITERATE

19.9% PROCESSED 1000 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 96468 TO 104972
PROJECTED ANSWERS: 94495 TO 102915

L25 50 SEA SSS SAM L24

=> s l24 full

FULL SEARCH INITIATED 11:59:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 100762 TO ITERATE

100.0% PROCESSED 100762 ITERATIONS
 SEARCH TIME: 00.00.04

97689 ANSWERS

L26 97689 SEA SSS FUL L24

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
140.28	651.32

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-7.43

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FILE 'CAPLUS' ENTERED AT 11:59:30 ON 09 SEP 2002

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FILE COVERS 1907 - 9 Sep 2002 VOL 137 ISS 11

FILE LAST UPDATED: 8 Sep 2002 (20020908/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 126

L27 50443 L26

=> s 127 and (peroxide or halogen)

159105 PEROXIDE

37803 PEROXIDES

174663 PEROXIDE

(PEROXIDE OR PEROXIDES)

92775 HALOGEN

17591 HALOGENS

102322 HALOGEN

(HALOGEN OR HALOGENS)

L28 2065 L27 AND (PEROXIDE OR HALOGEN)

```
=> s l28 and fluorocarbon
      12055 FLUOROCARBON
      .    3750 FLUOROCARBONS
      13705 FLUOROCARBON
            (FLUOROCARBON OR FLUOROCARBONS)
L29      16 L28 AND FLUOROCARBON

=> d ibib abs hitstr 1-16
```

L29 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:809199 CAPLUS
DOCUMENT NUMBER: 135:318851
TITLE: Method for preparing a fluoropolymer by radical polymerization in an aqueous emulsion
INVENTOR(S): Kappler, Patrick; Pascal, Thierry; Wille, Roice; Brulet, Daniel
PATENT ASSIGNEE(S): Atofina, Fr.
SOURCE: Fr. Demande, 16 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2804438	A1	20010803	FR 2000-1191	20000131

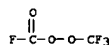
OTHER SOURCE(S): MARPAT 135:318851
AB Polymers based on vinylidene fluoride and, optionally, other fluoromonomers, with improved yellowing resistance and decreased fluorocarbon emission are manufd. by radical, emulsion polymn. in the presence of $CnF_{2n+1}CO_2Li$ ($n = 6-12$) surfactant, $ROCO_2R$ or $ROOR$ ($R = Et, Pr, iso-Pr, tert-Bu, \text{ or } tert-amyl$) initiator, chain-transfer agent selected from $iso-PrOH, AcOMe, AcOEt, AcOBu, di-Et \text{ malonate, and } di-Et \text{ carbonate, and, optionally, a paraffin with m.p. } 40-70^\circ\text{C.}$ and washing the coagulated emulsion with water until the I content is $\leq 100\text{ppm}$.
IT 35064-83-6P, Perfluoro(methyl vinyl ether)-vinylidene fluoride copolymer
RL: IMF (Industrial manufacture); PREP (Preparation) (prepg. fluoropolymers by radical polymn. in aq. emulsions)
RN 35064-83-6 CAPLUS
CN Ethene, trifluoro(trifluoromethoxy)-, polymer with 1,1-difluoroethene (9CI) (CA INDEX NAME)
CM 1
CRN 1187-93-5
CMF C3 F6 O



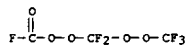
CM 2
CRN 75-38-7
CMF C2 H2 F2

L29 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2002 ACS

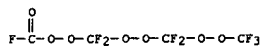
ACCESSION NUMBER: 1999:534597 CAPLUS
DOCUMENT NUMBER: 131:336721
TITLE: The reaction of difluorodioxirane with cesium trifluoromethoxide
AUTHOR(S): Huang, Qun; DesMarteau, Darryl D.
CORPORATE SOURCE: Department of Chemistry, Clemson University, Clemson, SC, USA
SOURCE: Chemical Communications (Cambridge) (1999), (17), 1671-1672
CODEN: CHCOFS; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:336721
AB The reaction of difluorodioxirane with cesium trifluoromethoxide in the presence of CaF forms $CF_3OOC(O)F$ and the new compds. $CF_3O(CF_2O)_nOC(O)F$ ($n = 1-3$); ^{13}C labeling shows that the dioxirane undergoes ring opening at the O-O bond.
IT 16118-40-4P 249729-77-9P 249729-78-0P 249729-80-4P
RL: SPN (Synthetic preparation); PREP (Preparation) (reaction of difluorodioxirane with carbonyl difluoride in presence of cesium fluoride)
RN 16118-40-4 CAPLUS
CN Carbonofluoridoperoxoic acid, trifluoromethyl ester (9CI) (CA INDEX NAME)



RN 249729-77-9 CAPLUS
CN Carbonofluoridoperoxoic acid, difluoro[(trifluoromethyl)dioxy]methyl ester (9CI) (CA INDEX NAME)



RN 249729-78-0 CAPLUS
CN Carbonofluoridoperoxoic acid, [(difluoro[(trifluoromethyl)dioxy]methyl)dioxy]difluoromethyl ester (9CI) (CA INDEX NAME)

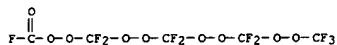


RN 249729-80-4 CAPLUS
CN Carbonofluoridoperoxoic acid, [[[(difluoro[(trifluoromethyl)dioxy]methyl)dioxy]difluoromethyl)dioxy]difluoromethyl ester (9CI) (CA INDEX NAME)

L29 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



L29 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

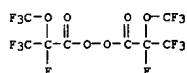
L29 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:286376 CAPLUS
DOCUMENT NUMBER: 126:264472
TITLE: Manufacture of acyl peroxides
INVENTOR(S): Diffendall, George Francis; Harding, Thomas William;
Hockman, Joseph Norman; Targett, Matthew John;
Wheland, Robert Clayton; Krespan, Carl George
PATENT ASSIGNEE(S): E.I. Du Pont De Nemours and Company, USA
SOURCE: PCT Int. Appl., 56 pp.
DOCUMENT TYPE: CODEM: PIXXD2
LANGUAGE: Patent
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9708142	A1	19970306	WO 1996-US13976	19960830
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5831131	A	19981103	US 1996-703232	19960826
CA 2230606	AA	19970306	CA 1996-2230606	19960830
EP 847387	A1	19980617	EP 1996-931442	19960830
EP 847387	B1	20020102		
R: DE				
JP 11511464	T2	19991005	JP 1996-510595	19960830
US 5962746	A	19991005	US 1998-128506	19980804
PRIORITY APPLN. INFO.:			US 1995-2961P P	19950830
			US 1996-703232 A	19960826
			WO 1996-US13976 W	19960830

AB A process for the faster manufg. of hydrocarbon, fluorocarbon and chlorocarbon acyl peroxides, useful as polymn. initiators and in org. synthesis, is disclosed wherein a metal or tetraalkylammonium hydroxide, a peroxide and an acyl halide are reacted under continuous vigorous agitation conditions so as to bring the reaction to substantial completion in less than one minute.

IT 90275-06-2P
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
USES (Uses)
(manuf. of acyl peroxides for polymn. catalysts by reaction of acyl halides, hydroxides, peroxides under vigorous agitation)

RN 90275-06-2 CAPLUS
CN Peroxide, bis[2,3,3,3-tetrafluoro-1-oxo-2-(trifluoromethoxy)propyl] (9CI) (CA INDEX NAME)



IT 2927-83-5
RL: RCT (Reactant); RACT (Reactant or reagent)

L29 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:71567 CAPLUS
DOCUMENT NUMBER: 124:178664
TITLE: Fluorocarbon rubbers modified by silicone resins
INVENTOR(S): Gentle, Thomas M.; Gornowicz, Gerald A.
PATENT ASSIGNEE(S): Dow Corning Corporation, USA
SOURCE: U.S., 11 pp.
DOCUMENT TYPE: CODEM: USXXAM
LANGUAGE: Patent
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5480930	A	19960102	US 1994-292305	19940818
EP 697437	A1	19960221	EP 1995-305600	19950811
EP 697437	B1	20020102		
R: DE, FR, GB				
JP 08170001	A2	19960702	JP 1995-210786	19950818
PRIORITY APPLN. INFO.:			US 1994-292305 A	19940818

AB Cured fluororubber compns., having high mech. strength, low-temp. flexibility, and solvent resistance and low fuel permeability, comprise fluororubbers with a Mooney viscosity of 5-160 50-95, amorphous silicone resins (degree of substitution 0.9-1.8) 5-50, and optionally polydiorganosiloxane gums or rubbers 0-40%. A compn. of Tecnoflon P 419 100, OH-contg. Me3SiO1/2/SiO2-based siloxane 30, CaCO3 8.5, triallylisocyanurate 2.2, and a peroxide 2.4 part was vulcanized to form a product with tensile strength 9.86 MPa, elongation 310%, 10% retraction (ASTM 1329-88) -7.degree. and -25.degree. in dry and ref. fuel C (RFC) condition, resp., and vol swelling 8% in RFC at 40.degree. for 1 wk.

IT 56357-87-0, Tetrafluoroethylene-trifluoromethyl trifluorovinyl ether-vinylidene fluoride copolymer
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(rubber; siloxane resin-contg. fluororubber compns. with low fuel permeability and good cold resistance)

RN 56357-87-0 CAPLUS
CN Ethene, tetrafluoro-, polymer with 1,1-difluoroethene and trifluoro(trifluoromethoxy)ethene (9CI) (CA INDEX NAME)

CH 1

CRN 1187-93-5
CMF C3 F6 O



CH 2

CRN 116-14-3
CMF C2 F4

L29 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)
(manuf. of acyl peroxides for polymn. catalysts by reaction of acyl halides, hydroxides, peroxides under vigorous agitation)
RN 2927-83-5 CAPLUS
CN Propanoyl fluoride, 2,3,3,3-tetrafluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



L29 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



CH 3

CRN 75-38-7
CMF C2 H2 F2



L29 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1995:362702 CAPLUS
 DOCUMENT NUMBER: 122:239348
 TITLE: Cyclofluoroalkylated fullerene compounds
 INVENTOR(S): Bekiarian, Paul G.; Fagan, Paul J.; Krusic, Paul J.
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
 SOURCE: U.S., 6 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5382718	A	19950117	US 1993-122118	19930916
US 5416243	A	19950516	US 1994-297334	19940829
WO 9507875	A1	19950323	WO 1994-US10103	19940915

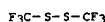
W: CA, JP
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
 PRIORITY APPL. INFO.: US 1993-122118 19930916
 OTHER SOURCE(S): MARPAT 122:239348
 AB Mixts. of cyclofluoroalkylated fullerenes are provided by the thermal [2 + 2] cycloaddn. of fluoroalkenes to a soln. or slurry of a fullerene. The cyclofluoroalkylated fullerene mixts. are useful as lubricants or additives to lubricants; in fluorocarbon and/or chlorofluorocarbon based cooling systems; in adhesives for fluorocarbon based polymers and in gas sepn. membranes (no data).
 IT 1187-93-SDP, Perfluoro(methyl vinyl ether), reaction products with fullerene
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of cyclofluoroalkylated fullerene mixts. via thermal [2+2] cycloaddn. reaction of fullerenes with fluoroalkenes)
 RN 1187-93-5 CAPLUS
 CN Ethene, trifluoro(trifluoromethoxy)- (9CI) (CA INDEX NAME)



L29 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1995:316220 CAPLUS
 DOCUMENT NUMBER: 123:45714
 TITLE: Dry etching of silicon compound layers
 INVENTOR(S): Yanagida, Toshiharu
 PATENT ASSIGNEE(S): Sony Corp., Japan
 SOURCE: U.S., 8 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5376234	A	19941227	US 1993-78928	19930621
JP 3109253	B2	20001113	JP 1992-170980	19920629

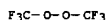
PRIORITY APPL. INFO.: JP 1992-170980 A 19920629
 AB A saccaptan, a thioether, and/or a disulfide having a fluorocarbon side chain is used as a main component of the etching gas. These compds. may form CF_x and S on disocn. due to elec. discharges, and contribute to high-rate etching and surface protection of a wafer. If a halogen compd. such as COF₂, SOF₂, or NOF is added to the etching gas, a high-rate etching reaction due to extn. of O atoms from SiO₂ and structural reinforcement of carbonaceous polymer become possible. Also, S₂F₂ may be added for reinforcing deposition of S. These effects lead to a redn. of the amt. of deposited polymer necessary for highly selective processing, and contribute greatly to low pollution in a process.
 IT 372-64-5, Bis(trifluoromethyl)disulfide
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (plasma etching of silicon compd. layers in gas mixts. contg.)
 RN 372-64-5 CAPLUS
 CN Disulfide, bis(trifluoromethyl) (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L29 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1992:513758 CAPLUS
 DOCUMENT NUMBER: 117:113758
 TITLE: Solid materials with reduced surface energy and surface treatment for obtaining the same
 INVENTOR(S): Tadenuma, Katsuyoshi; Kawamura, Fumiaki
 PATENT ASSIGNEE(S): Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JXXXXF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04048075	A2	19920218	JP 1990-158500	19900615
JP 2986513	B2	19991206		

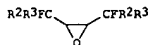
AB The title materials have fluorocarbon groups chem. bonded on the surface. Treatment of glass and ceramics with Freon 12 and Freon 13 with .gamma.-ray or microwave irradiation was esp. effective for reduced surface energy (increased water contact angle).
 IT 927-84-4, Bis(trifluoromethyl) peroxide
 RL: USES (Uses)
 (solids surface energy redn. by surface treatment with)
 RN 927-84-4 CAPLUS
 CN Peroxide, bis(trifluoromethyl) (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L29 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1991:582630 CAPLUS
 DOCUMENT NUMBER: 115:182630
 TITLE: Fluorocarbon compounds and processes for preparation thereof
 INVENTOR(S): Krespan, Carl George
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
 SOURCE: PCT Int. Appl., 26 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9109010	A2	19910627	WO 1990-US7114	19901210
WO 9109010	A3	19910905		

W: CA, JP
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
 US 5101058 A 19920331 US 1989-448651 19891211
 CA 2071199 AA 19910612 CA 1990-2071199 19901210
 EP 504285 A1 19920923 EP 1991-901382 19901210
 EP 504285 B1 19941012
 R: DE, FR, GB, IT
 JP 05502866 T2 19930520 JP 1991-501767 19901210
 JP 3172173 B2 20010604 JP 1999-201502 19901210
 JP 2000053665 A2 20000222 JP 1991-803441 19911206
 US 5185477 A 19930209 JP 1999-201485 19990715
 JP 2000053604 A2 20000222
 JP 3130303 B2 20010131
 PRIORITY APPL. INFO.: US 1989-448651 A 19891211
 JP 1991-501767 A3 19901210
 WO 1990-US7114 W 19901210
 OTHER SOURCE(S): MARPAT 115:182630
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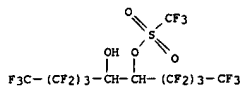


AB Fluorinated (poly)sulfonates and halosulfonates R₂R₃FCCHXCH₂R₁(OSO₂)_n2 (R₁ = H, CFR₂R₃; R₂, R₃ = F, perfluoroalkyl; R₁ = H, CFR₂R₃; X = Cl, Br, Iodo; Z = Cl, Br, OCH₂CHXCH₂CF₂R₃; n = 1-6), halohydrins R₂R₃CHXCH₂(OH)CF₂R₃, and epoxides (I), useful as monomers and chem. intermediates, are prepd. by reacting (perfluoroalkyl)ethylenes R₂R₃FCCH₂CH₂R₁ with SO₃ and a halogen, i.e. Cl, Br or iodine, in the optional presence of a solvent, and further reacting the products. Thus, 0.13 mol CF₃(CF₂)₃CH₂CH₂ was added to 0.12 mol SO₃ with stirring at 25.degree. followed by 0.12 mol I, whereupon an exotherm carried to 45.degree. and then abated. The mixt. was stirred overnight at 25.degree. and then at 50.degree. for 30 min, evapd. in vacuo at 0.15 mmHg, stirred with H₂O, filtered and air-dried to give 58% (based on SO₃) [CF₃(CF₂)₃CH₂CH₂O]SO₃.
 IT 1493-13-6, Trifluoromethanesulfonic acid
 RL: RCT (Reactant)
 (addn. reaction of, with bis(perfluorobutyl)ethylene oxide)
 RN 1493-13-6 CAPLUS

L29 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)
 CN Methanesulfonic acid, trifluoro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



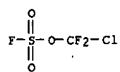
IT 136483-80-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as intermediate for fluoropolymers)
 RN 136483-80-2 CAPLUS
 CN Methanesulfonic acid, trifluoro-, 3,3,4,4,5,5,6,6-nonafluoro-2-hydroxy-1-(nonafluorobutyl)hexyl ester (9CI) (CA INDEX NAME)



L29 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1980:638741 CAPLUS
 DOCUMENT NUMBER: 93:238741
 TITLE: Halogen fluorosulfate reactions with fluorocarbons
 AUTHOR(S): Shack, Carl J.; Christe, K. O.
 CORPORATE SOURCE: Rocketdyne, Div. Rockwell Int., Canoga Park, CA, 91304, USA
 SOURCE: J. Fluorine Chem. (1980), 16(1), 63-73
 CODEN: JFLCAR; ISSN: 0022-1139
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The reaction of simple fluorocarbon halides with ClOSO₂F or its mixts. with BrOSO₂F to produce RfOSO₂F (Rf = perfluoroalkyl) has been investigated. In many cases even primary chlorine in CF₂Cl groups can be replaced by OSO₂F. Primary bromine or iodine in CF₂X are more readily replaced. The mechanism of this replacement reaction has been established by the isolation of the metastable intermediate RfI(OSO₂F)₂. Neither secondary chlorine nor bromine in CFX groups is affected. With the secondary iodide (CF₃)₂CFI, the salt [(CF₃)₂CF]⁺[I(OSO₂F)₄]⁻ is formed. Furthermore, ClOSO₂F is capable of converting fluorocarbon acids or their derivs. into fluorocarbon halides. A combination of these two ClOSO₂F reactions with the known conversion of RfCF₂OSO₂F to the corresponding fluorocarbon acid offers a novel, high yield chain shortening reaction.

IT 6069-31-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, by reaction of halogen fluorosulfate with fluorinated carboxylic acid)
 RN 6069-31-4 CAPLUS
 CN Fluorosulfuric acid, chlorodifluoromethyl ester (8CI, 9CI) (CA INDEX NAME)

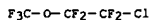


L29 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1976:576764 CAPLUS
 DOCUMENT NUMBER: 85:176764
 TITLE: Direct synthesis of fluorocarbon peroxides. II. The addition of fluoroperoxytrifluoromethane to alkenes
 AUTHOR(S): Hohorst, Frederick A.; Desmarreau, Darryl D.
 CORPORATE SOURCE: Dep. Chem., Kansas State Univ., Manhattan, Kans., USA
 SOURCE: Inorg. Nucl. Chem. - Herbert H. Hyman Mem. Vol. (1976), 63-6. Editor(s): Katz, Joseph J.; Sheft, Irving.
 Pergamon: Oxford, Engl.
 CODEN: 33T2AU

DOCUMENT TYPE: Conference
 LANGUAGE: English
 AB F₃COOF reacted with alkenes, C₂H₄, C₂F₃Cl, perfluoropropene, and perfluorocyclopentene, to give the expected peroxides which were characterized by IR and NMR. Thus, treatment of C₂F₃Cl gave F₃COCF₂CF₂Cl, F₃COCFClCF₃, F₃COOCFCF₃, and F₃COOCF₂CF₂Cl.

IT 1561-50-8P 54362-31-1P 59426-77-6P
 60901-71-5P 60901-72-6P 60901-73-7P
 60901-74-8P 60901-75-9P 60901-76-0P
 60901-77-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

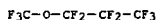
RN 1561-50-8 CAPLUS
 CN Ethane, 1-chloro-1,1,2,2-tetrafluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



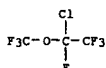
RN 54362-31-1 CAPLUS
 CN Peroxide, 2-chloro-1,1,2,2-tetrafluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



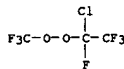
RN 59426-77-6 CAPLUS
 CN Propane, 1,1,1,2,2,3,3-heptafluoro-3-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



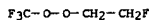
RN 60901-71-5 CAPLUS
 CN Ethane, 1-chloro-1,1,2,2-tetrafluoro-1-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



L29 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)
 RN 60901-72-6 CAPLUS
 CN Peroxide, 1-chloro-1,2,2,2-tetrafluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



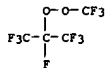
RN 60901-73-7 CAPLUS
 CN Peroxide, 2-fluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



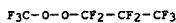
RN 60901-74-8 CAPLUS
 CN Propane, 1,1,1,2,3,3,3-heptafluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



RN 60901-75-9 CAPLUS
 CN Peroxide, 1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

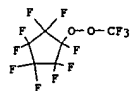


RN 60901-76-0 CAPLUS
 CN Peroxide, heptafluoropropyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 60901-77-1 CAPLUS
 CN Peroxide, nonafluorocyclopentyl trifluoromethyl (9CI) (CA INDEX NAME)

L29 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



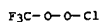
IT 34511-13-2
 RL: RCT (Reactant)
 (reaction of, with alkenes)
 RN 34511-13-2 CAPLUS
 CN Peroxyhypofluorous acid, trifluoromethyl ester (9CI) (CA INDEX NAME)



L29 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1975:72506 CAPLUS
 DOCUMENT NUMBER: 82:72506
 TITLE: Direct synthesis of fluorocarbon peroxides. III. Addition of chloroperoxytrifluoromethane to olefins
 AUTHOR(S): Walker, Nyal; DesMarteau, Darryl D.
 CORPORATE SOURCE: Dep. Chem., Kansas State Univ., Manhattan, Kans., USA
 SOURCE: J. Am. Chem. Soc. (1975), 97(11), 13-17
 CODEN: JACSAT

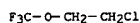
DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB CF3OOC1 added to olefins to give trifluoromethyl-peroxy derivs. in high yield. The reactions were unidirectional and proceeded by an electrophilic mechanism, in which the positive chlorine of CF3OOC1 adds to the carbon with the greatest no. of hydrogens or the fewest fluorines. Reactions with C2H4, C2F4, C2F3Cl, CF2=CCl2, CF2=CH2, CFH=CHCl, and cis-CFH=CFH occurred readily >0.degree.; perfluoropropene and perfluoro-cyclopentene were unreactive under all conditions tried. With cis-CFH=CFH, the reaction is stereo-specific.
 IT 32755-26-3
 RL: RCT (Reactant)
 (addn. reaction with olefins)
 RN 32755-26-3 CAPLUS
 CN Peroxyhypochlorous acid, trifluoromethyl ester (8CI, 9CI) (CA INDEX NAME)



IT 1561-50-8P 1645-95-0P 25476-71-5P
 25957-33-9P 54362-30-0P 54362-31-1P
 54362-32-2P 54362-33-3P 54362-34-4P
 54362-35-5P 54362-36-6P 54362-37-7P
 54362-38-8P 54362-39-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 1561-50-8 CAPLUS
 CN Ethane, 1-chloro-1,1,2,2-tetrafluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

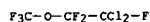


RN 1645-95-0 CAPLUS
 CN Ethane, 1-chloro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

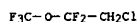


RN 25476-71-5 CAPLUS
 CN Ethane, 1,1-dichloro-1,2,2-trifluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

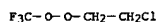
L29 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



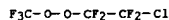
RN 25957-33-9 CAPLUS
 CN Ethane, 2-chloro-1,1,1-difluoro-1-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



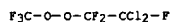
RN 54362-30-0 CAPLUS
 CN Peroxide, 2-chloroethyl trifluoromethyl (9CI) (CA INDEX NAME)



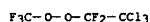
RN 54362-31-1 CAPLUS
 CN Peroxide, 2-chloro-1,1,2,2-tetrafluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



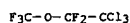
RN 54362-32-2 CAPLUS
 CN Peroxide, 2,2-dichloro-1,1,2-trifluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



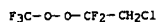
RN 54362-33-3 CAPLUS
 CN Peroxide, 2,2,2-trichloro-1,1-difluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 54362-34-4 CAPLUS
 CN Ethane, 1,1,1-trichloro-2,2-difluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



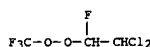
RN 54362-35-5 CAPLUS
 CN Peroxide, 2-chloro-1,1-difluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



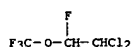
RN 54362-36-6 CAPLUS

L29 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)

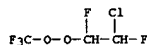
CN Peroxide, 2,2-dichloro-1-fluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



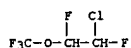
RN 54362-37-7 CAPLUS
 CN Ethane, 1,1-dichloro-2-fluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



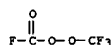
RN 54362-38-8 CAPLUS
 CN Peroxide, 2-chloro-1,2-difluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 54362-39-9 CAPLUS
 CN Ethane, 1-chloro-1,2-difluoro-2-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



IT 16118-40-4
 RL: RCT (Reactant)
 (reaction of, with chlorine fluoride)
 RN 16118-40-4 CAPLUS
 CN Carbonofluoridoperoxoic acid, trifluoromethyl ester (9CI) (CA INDEX NAME)



L29 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1975:50798 CAPLUS

DOCUMENT NUMBER: 82:50798

TITLE: Halogen perchlorates. Reactions with fluorocarbon halides

AUTHOR(S): Schack, Carl J.; Filipovich, Don; Christie, Karl O.

CORPORATE SOURCE: Rocketdyne Div., Rockwell Int., Canoga Park, Calif., USA

SOURCE: Inorg. Chem. (1975), 14(1), 145-51

CODEN: INOCAJ

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The reactions of XCIO_4 ($\text{X} = \text{Cl}, \text{Br}$) with numerous fluoroalkyl halides were examd. For fluorocarbon iodides, these reactions generally produced high yields of the novel fluorocarbon perchlorates CF_3ClO_4 , $\text{CF}_3\text{CF}_2\text{ClO}_4$, $n\text{-C}_7\text{F}_{15}\text{ClO}_4$, $\text{O}_4\text{ClCF}_2\text{CF}_2\text{ClO}_4$, and $\text{ICF}_2\text{CF}_2\text{ClO}_4$. Important insight into the mechanism of formation of these compds. was obtained through the isolation of complex intermediates such as $(\text{CF}_3)_2\text{CF}(\text{ClO}_4)_2$ and $n\text{-C}_7\text{F}_{15}(\text{ClO}_4)_2$. Based on their vibrational spectra, these intermediates have the ionic structure $[(\text{Rf})_2\text{I}][\text{I}(\text{ClO}_4)_4]^-$. Fluorocarbon bromides reacted less readily but sometimes did produce perchlorate derivs. such as $(\text{O}_4\text{ClCF}_2\text{CFBr})_2$, $\text{CF}_3\text{CFBrCF}_2\text{ClO}_4$, and $\text{BrCF}_2\text{CF}_2\text{ClO}_4$. Neither mono nor di, primary nor secondary Cl contained in satd. RfCl materials interacted with these halogen perchlorates. These and other related reactions are discussed and characteristic data are given for this new and interesting class of compds.

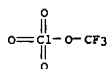
IT 52003-45-99

RL: SPN (Synthetic preparation); PREP (Preparation)

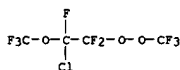
(prepn. of)

RN 52003-45-9 CAPLUS

CN Perchloric acid, trifluoromethyl ester (9CI) (CA INDEX NAME)

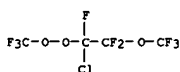


L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



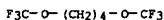
RN 42028-66-0 CAPLUS

CN Peroxide, 1-chloro-1,2,2-trifluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 50921-20-5 CAPLUS

CN Butane, dichlorohexafluoro-1,4-bis(trifluoromethoxy)- (9CI) (CA INDEX NAME)

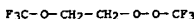


2 (D1-Cl)

6 (D1-F)

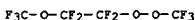
RN 50921-48-7 CAPLUS

CN Peroxide, 2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 50921-49-8 CAPLUS

CN Peroxide, 1,1,2,2-tetrafluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 50921-50-1 CAPLUS

CN Peroxide, 1,4-dichloro-1,2,2,3,3,4-hexafluoro-4-(trifluoromethoxy)butyl trifluoromethyl (9CI) (CA INDEX NAME)

L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1974:403295 CAPLUS

DOCUMENT NUMBER: 81:3295

TITLE: Direct synthesis of fluorocarbon peroxides. I. Addition of bis(trifluoromethyl) trioxide to selected carbon-carbon multiple bonds

AUTHOR(S): Hohorst, Frederick A.; Paukstelis, Joseph V.; DesMariseau, Darryl D.

CORPORATE SOURCE: Dep. Chem., Kansas State Univ., Manhattan, Kans., USA

SOURCE: J. Org. Chem. (1974), 39(9), 1298-1302

CODEN: JOCEAH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The addn. of bis(trifluoromethyl) trioxide, $\text{CF}_3\text{OOOCF}_3$, to a variety of C-C multiple bonds is reported. With ethylene, tetrafluoroethylene, chlorotrifluoroethylene, hexafluoropropylene, perfluorobutene-2, and perfluorocyclopentene the usual products are $\text{CF}_3\text{OOCRR}(\text{CF}_3)_2\text{OOCF}_3$ and $\text{CF}_3\text{OOCRR}(\text{CF}_3)_2\text{OOCF}_3$. These products form in 50-80% yield with alkenes which are not prone to radical polymn. In the case of tetrafluoroethylene and chlorotrifluoroethylene, addnl. products contg. two mol. of alkene are obsd. as well as several trifluoromethyl ethers. The proposed reaction mechanism of initial addn. of $\text{CF}_3\text{O}_3\text{bul}$ to the alkene is consistent with the obsd. products.

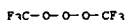
IT 1718-18-9

RL: RCT (Reactant)

(addn. reaction of, with alkenes)

RN 1718-18-9 CAPLUS

CN Trioxide, bis(trifluoromethyl) (8CI, 9CI) (CA INDEX NAME)



IT 39479-36-2P 42028-65-9P 42028-66-0P
50921-20-5P 50921-48-7P 50921-49-8P
50921-50-1P 50921-51-2P 50921-52-3P
50921-53-4P 50921-54-5P 50921-55-6P
50921-57-8P 50921-74-9P 50921-75-0P
50921-76-1P 50921-77-2P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN 39479-36-2 CAPLUS

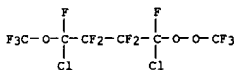
CN Butane, 1,1,2,2,3,3,4,4-octafluoro-1,4-bis(trifluoromethoxy)- (9CI) (CA INDEX NAME)



RN 42028-65-9 CAPLUS

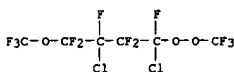
CN Peroxide, 2-chloro-1,1,2-trifluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



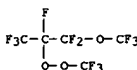
RN 50921-51-2 CAPLUS

CN Peroxide, 1,3-dichloro-1,2,2,3,4,4-hexafluoro-4-(trifluoromethoxy)butyl trifluoromethyl (9CI) (CA INDEX NAME)



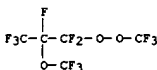
RN 50921-52-3 CAPLUS

CN Peroxide, 1-[difluoro(trifluoromethoxy)methyl]-1,2,2,2-tetrafluoroethyl trifluoromethyl (9CI) (CA INDEX NAME)



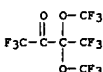
RN 50921-53-4 CAPLUS

CN Peroxide, 1,1,2,3,3,3-hexafluoro-2-(trifluoromethoxy)propyl trifluoromethyl (9CI) (CA INDEX NAME)



RN 50921-54-5 CAPLUS

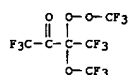
CN 2-Butanone, 1,1,1,4,4,4-hexafluoro-3-bis(trifluoromethoxy)- (9CI) (CA INDEX NAME)



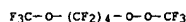
RN 50921-55-6 CAPLUS

CN 2-Butanone, 1,1,1,4,4,4-hexafluoro-3-(trifluoromethoxy)-3-[(trifluoromethyl)dioxy]- (9CI) (CA INDEX NAME)

L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)

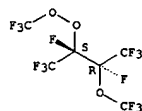


RN 50921-57-8 CAPLUS
CN Peroxide, 1,1,2,2,3,3,3,4,4-octafluoro-4-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)



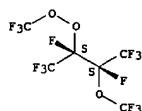
RN 50921-74-9 CAPLUS
CN Peroxide, 1,2,3,3,3-pentafluoro-2-(trifluoromethoxy)-1-(trifluoromethyl)ethyl trifluoromethyl, [S-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 50921-75-0 CAPLUS
CN Peroxide, 1,2,3,3,3-pentafluoro-2-(trifluoromethoxy)-1-(trifluoromethyl)ethyl trifluoromethyl, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 50921-76-1 CAPLUS
CN Peroxide, 1,2,2,3,3,4,4,5-octafluoro-5-(trifluoromethoxy)cyclopentyl trifluoromethyl, cis- (9CI) (CA INDEX NAME)

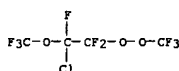
L29 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1973:478017 CAPLUS
DOCUMENT NUMBER: 79:78017
TITLE: Direct synthesis of fluorocarbon peroxides. Addition of bis(trifluoromethyl) trioxide to chlorotrifluoroethylene
AUTHOR(S): Hohorst, Frederick A.; DesMarteau, Darryl D.
CORPORATE SOURCE: Dep. Chem., Kans. State Univ., Manhattan, Kans., USA
SOURCE: J. Chem. Soc., Chem. Commun. (1973), (12), 110873
CODEN: JCCCAT
DOCUMENT TYPE: Journal
LANGUAGE: English

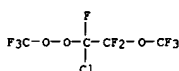
AB Addn. of CF3OOCF3 to F2C:CFCl at 70.degree. gave a mixt. contg. CF3OOCF2CFClOCF3 and CF3OCF2CFClOOCF3. The structures were confirmed by 19F NMR.

IT 42028-65-9P 42028-66-0P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 42028-65-9 CAPLUS
CN Peroxide, 2-chloro-1,1,2-trifluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)

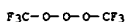


RN 42028-66-0 CAPLUS
CN Peroxide, 1-chloro-1,1,2-trifluoro-2-(trifluoromethoxy)ethyl trifluoromethyl (9CI) (CA INDEX NAME)



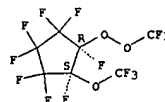
IT 1718-18-9
RL: RCT (Reactant) (reaction of, with chlorotrifluoroethylene)

RN 1718-18-9 CAPLUS
CN Trioxide, bis(trifluoromethyl) (8CI, 9CI) (CA INDEX NAME)



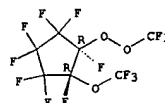
L29 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)

Relative stereochemistry.



RN 50921-77-2 CAPLUS
CN Peroxide, 1,2,2,3,3,4,4,5-octafluoro-5-(trifluoromethoxy)cyclopentyl trifluoromethyl, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L29 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2002 ACS

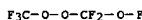
ACCESSION NUMBER: 1969:67606 CAPLUS
DOCUMENT NUMBER: 70:67606
TITLE: Perfluoroalkylperoxy perfluoroalkylfluoroxo compounds
INVENTOR(S): Prager, Julianne H.; Thompson, Phillip G.
PATENT ASSIGNEE(S): Minnesota Mining and Manufg. Co.
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3420866	A	19690107	US 1966-614375	19661212

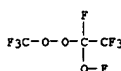
AB CF3CO2MO (1 g.) in a stainless steel tray was placed in a 450-ml. Cu vessel, the vessel cooled to -20.degree. and flushed with N, and the contents treated with 3% F in N at 0.02 ft.3/min. 7 hrs. The off gases were passed through a trap immersed in liq. air; the contents of the trap fractionated through traps at -78.degree., -119.degree., and -196.degree.; and the contents of the -196.degree. traps sepd. by gas chromatog. to give 16% C2F5OF (I). Similarly were prepd. (compd. fluorinated and products given): (CF3)2C(OH)2 (II); (CF3)2C(OF)2 (III); CF3CO2Na (IV), 23% I, 18% CF3CF(OF)2 (V), and F2C(OF)2 (VI); IV, I, V, VI, C2F5OOCF2OF, CF3OOCF2OF, C2F5OOCF(OF)CF3, CF3OOCF(OF)CF3, and [CF3CF(OF)]2O2; (EtO)4C, I; (CF3)3CONa, (CF3)3COF; C5F11CO2Na, perfluorohexyloxyfluorides; ClCF2CF2O2Na, ClCF2CF2OF; II Na salt, IV, (CF3)2C(OF)2, I, and V. Other F-contg. compds. gave similar OF deriva.

IT 16156-37-9P 22410-16-0P
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

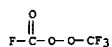
RN 16156-37-9 CAPLUS
CN Hypofluorous acid, difluoro[(trifluoromethyl)dioxy)methyl ester (9CI) (CA INDEX NAME)



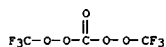
RN 22410-16-8 CAPLUS
CN Ethanol, tetrafluoro-1-[(trifluoromethyl)dioxy]-, hypofluorite (8CI) (CA INDEX NAME)



L29 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1968:402462 CAPLUS
 DOCUMENT NUMBER: 69:2462
 TITLE: Fluorocarbon peroxides. Novel
 peroxides prepared from bis(fluoroformyl)
 peroxide
 AUTHOR(S): Talbott, Richard L.
 CORPORATE SOURCE: Minnesota Mining and Mfg. Co., Saint Paul, Minn., USA
 SOURCE: J. Org. Chem. (1968), 33(5), 2095-9
 CODEN: JOCEAH
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The photodecompn. of bis(fluoroformyl) peroxide in a quartz app.
 gives fragments trapped with difluorodiazirine to give fluoroformyl
 perfluoromethyl peroxide (I). Hydrolysis of I affords either
 bis(perfluoromethyl) bis(peroxy)carbonate or perfluoromethyl
 hydroperoxide, depending on the reaction conditions. Fluorination of
 fluoroformyl perfluoromethyl peroxide and bis(perfluoromethyl)
 bis(peroxy)carbonate provides the corresponding fluoroxy compds. in high
 yields. The peroxides prepd. are stable in the dark at room
 temp. 18 references.
 IT 16118-40-4P 16156-35-7P 16156-36-8P
 16156-37-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 16118-40-4 CAPLUS
 CN Carbonofluoridoperoxoic acid, trifluoromethyl ester (9CI) (CA INDEX NAME)



RN 16156-35-7 CAPLUS
 CN Carbonodiperoxoic acid, bis(trifluoromethyl) ester (9CI) (CA INDEX NAME)

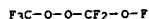


RN 16156-36-8 CAPLUS
 CN Hydroperoxide, trifluoromethyl (8CI, 9CI) (CA INDEX NAME)



RN 16156-37-9 CAPLUS
 CN Hypofluorous acid, difluoro[(trifluoromethyl)dioxy]methyl ester (9CI) (CA INDEX NAME)

L29 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS (Continued)



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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
76.29	727.61

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-9.91	-17.34

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PALM INTRANET

Day : Monday
Date: 9/9/2002
Time: 12:08:12

Inventor Name Search Result

Your Search was:

Last Name = JANIN

First Name = ROBERT

Application#	Patent#	Status	Date Filed	Title	Inventor Name
08608519	6316636	150	02/28/1996	SYNTHESIS OF FLUOROCARBON COMPOUNDS	JANIN , ROBERT
09961347	Not Issued	071	09/25/2001	SYNTHESIS OF FLUOROCARBON COMPOUNDS	JANIN, ROBERT

Inventor Search Completed: No Records to Display.

	Last Name	First Name	
Search Another: Inventor	<input type="text" value="JANIN"/>	<input type="text" value="ROBERT"/>	<input type="button" value="Search"/>

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PALM INTRANET

Day : Monday
Date: 9/9/2002
Time: 12:13:00

Inventor Name Search Result

Your Search was:

Last Name = SAINT-JALMES

First Name = LAURENT

Application#	Patent#	Status	Date Filed	Title	Inventor Name
<u>09171990</u>	<u>6201149</u>	150	01/19/1999	ORGANIC BASE HYDROGENOFLUOROSULPHONATES, THEIR USE IN RELEASING ORGANIC BASES FROM THEIR FLUOROHYDRATE, METHOD OF PREPARATION THEREOF, COMPOUND CONTAINING THEM	SAINT-JALMES , LAURENT
<u>09180598</u>	<u>6166271</u>	150	01/19/1999	METHOD FOR SYNTHESIS OF HYDROCARBON COMPOUNDS CONTAINING FLUORINE ON AT LEAST ONE ALKYL CHAIN CARBON	SAINT-JALMES , LAURENT
<u>09012232</u>	Not Issued	161	01/23/1998	REAGENT AND PROCESS WHICH ARE USEFUL FOR GRAFTING A SUBSTITUTED DIFLUOROMETHYL GROUP ONTO A COMPOUND CONTAINING AT LEAST ONE ELECTROPHILIC FUNCTION	SAINT-JALMES , LAURENT
<u>09230761</u>	<u>6203670</u>	150	04/06/1999	METHOD FOR GRAFTING A SUBSTITUTED DIFLUOROMETHYL GROUP	SAINT-JALMES , LAURENT
<u>08620359</u>	<u>5859288</u>	150	03/22/1996	REAGENT AND PROCESS FOR THE SYNTHESIS OF OXYSULPHIDE-CONTAINING FLUORINE-CONTAINING ORGANIC DERIVATIVES	SAINT-JALMES , LAURENT
<u>08620348</u>	<u>5756849</u>	150	03/22/1996	REAGENT AND PROCESS WHICH ARE USEFUL FOR GRAFTING A SUBSTITUTED DIFLUOROMETHYL GROUP ONTO A COMPOUND CONTAINING AT LEAST ONE ELECTROPHILIC FUNCTION	SAINT-JALMES , LAURENT
<u>08608519</u>	<u>6316636</u>	150	02/28/1996	SYNTHESIS OF FLUOROCARBON COMPOUNDS	SAINT-JALMES , LAURENT

<u>09201854</u>	Not Issued	094	12/01/1998	REAGENT AND PROCESS WHICH ARE USEFUL FOR GRAFTING A SUBSTITUTED DIFLUOROMETHYL GROUP ONTO A COMPOUND CONTAINING AT LEAST ONE ELECTROPHILIC FUNCTION	SAINT- JALMES , LAURENT
<u>09308257</u>	6203721	150	07/19/1999	COMPOUNDS USEFUL FOR PERHALOGENOALKYLATION, REAGENT FOR IMPLEMENTING THESE COMPOUNDS AND SYNTHESIS METHOD FOR OBTAINING THESE COMPOUNDS	SAINT- JALMES , LAURENT
<u>09609216</u>	Not Issued	061	07/05/2000	EXCHANGE AND TO THE RELEASE OF AN AMINE FROM ITS CARBAMOYL FLUORIDE	SAINT- JALMES, LAURENT
<u>10019694</u>	Not Issued	030	05/03/2002	METHOD FOR DEHYDROGENOFLUORINATION OF AN AROMATIC CARBAMOYL FLUORIDE	SAINT- JALMES, LAURENT
<u>09937856</u>	Not Issued	030	01/10/2002	METHOD FOR ACTIVATING MINERAL FLUORIDE IN AN ORGANIC MEDIUM	SAINT- JALMES, LAURENT
<u>09937853</u>	Not Issued	020	01/10/2002	METHOD FOR ACTIVATING AROMATIC SUBSTRATES BY MICROWAVES	SAINT- JALMES, LAURENT
<u>09961347</u>	Not Issued	071	09/25/2001	SYNTHESIS OF FLUOROCARBON COMPOUNDS	SAINT- JALMES, LAURENT
<u>09786665</u>	Not Issued	093	03/07/2001	METHOD FOR CONDENSATION OF AROMATIC DERIVATIVE(S) AND A SULPHINIC DERIVATIVE	SAINT- JALMES, LAURENT
<u>09768604</u>	6388126	150	01/25/2001	ORGANIC BASE HYDROGENOFLUOROSULPHONATES, THEIR USE IN RELEASING ORGANIC BASES FROM THEIR FLUOROHYDRATE, METHOD OF PREPARATION THEREOF, COMPOUND CONTAINING THEM	SAINT- JALMES, LAURENT

Inventor Search Completed: No Records to Display.

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